IMPACT OF LEADERSHIP IN SCALING STARTUPS
IN EDTECH PRODUCT SPACE
IN EMERGING MARKETS
SUCH AS INDIA

by

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DISSERTATION

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IMPACT OF LEADERSHIP IN SCALING STARTUPS
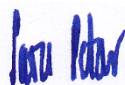# IN EDTECH PRODUCT SPACE
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DEDICATION

This research is an unyielding tribute to my dearly departed parents (Late Mr. Dinesh Chatterjee & Late Mrs. Namita Chatterjee), whose unwavering patronage and fortitude have relentlessly fueled my zeal and ardor towards attaining my aspirations. Regardless of the magnitude or insignificance, their indomitable backing and unwavering support have emboldened me to relentlessly pursue my dreams.

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This thesis is a grandiloquent dedication to the valiant and visionary entrepreneurs and leaders in the EdTech product space in emerging markets, whose zealous fervor, unyielding perseverance, and resolute commitment to transforming the lives of students and learners have been an enduring source of inspiration and motivation for me. This research represents a humble yet significant contribution to their relentless efforts towards shaping the future of education, and I am honored to be a part of this noble pursuit.

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ABSTRACT

IMPACT OF LEADERSHIP IN SCALING STARTUPS IN EDTECH PRODUCT
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SUCH AS INDIA

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Dissertation Chair: Dr. Ljiljana Kukec
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This research investigates **the impact of leadership on scaling startups in the EdTech product space in emerging markets** such as India. The main aim of this study is to examine the significant impact of leadership in the expansion of start-ups in the Ed-Tech sector within emerging markets like India. The further objectives of the study are:

1. To identify the role of leadership in business growth and performance in context to Indian Ed-tech startups
2. To determine the main components of leadership effectiveness that contributes to the scalability of start-ups and specifically Indian Ed-tech startups
3. To analyze the impact of strong leadership on the scaling of start-ups and specifically Indian Ed-tech startups.

The results of the study indicate that leadership plays a critical role in scaling EdTech startups in emerging markets. The research also explored how different leadership styles and behaviors affect the growth and success of EdTech startups in emerging markets. The study employs mixed-methods of research by combining both quantitative and qualitative analysis, to create a more holistic and nuanced understanding of the research topic, providing a more robust and reliable conclusion. Inputs taken from EdTech entrepreneurs & employees, investors, and industry experts.

The data analysis part of the research was carried out using descriptive statistics, reliability analysis, factor analysis and regression analysis. Descriptive statistics was used to represent the changes that occurred in the collected data. Through calculating the frequencies and graphing them, trends and patterns within the data are clearly highlighted in a precise manner. Reliability analysis was used as there was Likert scale type data. The Cronbach alpha tests the internal consistency of the data and gives an indication on whether or not the data is reliable to carry out tests and make conclusions. Factor analysis is a dimension reduction method used to identify the important factors from the factors considered. And finally, regression analysis was used to identify relationships between variables and test the hypotheses. By implementing regression analysis to test the hypotheses, the analysis resulted in the following conclusions that Adaptability, Strong communication, Interpersonal skills, Creativity, Decision Making, Self-Discipline, Resilience and Empowerment as a leadership attribute in scaling start-ups do have significant impacts on Ed-tech businesses scaling performance.

The research also reveals that certain contextual factors in emerging markets, such as limited access to capital and talent, pose unique challenges to scaling EdTech startups. However, effective leadership can help overcome these challenges and enable sustainable growth in the EdTech sector.

The findings of this study have practical implications for EdTech entrepreneurs, investors, and policymakers, and can inform the development of effective leadership strategies to promote the growth and success of EdTech startups in emerging markets.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

CHAPTER I:

INTRODUCTION

1.1 An introduction to the research background:

Leadership plays a pivotal role in providing a sense of direction to an organization. The efficacy and caliber of leadership decisively influence the destiny of firms. Proficient leadership stands as a crucial determinant that shapes the prospects of any entity. The potency of a leader and their adeptness in disseminating knowledge among the team profoundly impact the strategies pursued by the organization. The cornerstone of collaboration lies in trust, a paramount factor compelling individuals to work in unison. Notably, the organizational performance benefits from the effectiveness of leadership, particularly when the upper echelons of the organization embody leadership traits, leading to more favorable feedback. The triumph of any organization hinges on the capacity of its leadership to foster an environment that fosters a culture of information sharing within the company (Cakir and Adiguzel, 2020). Leadership development stands as a pivotal element that wields influence over the performance of startups, augmenting their human capital and bolstering their survival rate during the nascent stages. The inherent leadership capabilities of a startup bear elemental significance in determining its competitiveness and overall performance. Accordingly, startups are advised to administer employee training programs geared towards honing effective leadership competencies (Prommer, Tiberius, and Kraus, 2020). In order to ensure long-term viability, companies must cultivate entrepreneurial prowess.

Despite the role of leadership in the success of the startup, this topic is not widely studied in empirical studies. Evidence suggests that transformational leadership styles have a positive impact on the startup's performance. In the context of large startups, the laissez-faire leadership style has a significant positive relationship with the company's performance. The transactional leadership style has a negative impact on the performance of small start-ups but the same style has shown positive relation with performance in large

startups. There is no one size fits all approach when it comes to leadership styles. Leaders must equip themselves with different leadership styles used in different situations. Leadership cannot display just one type of leadership style and behavior for all situations. They are required to adopt different leadership styles depending on the situation (Zaech and Baldegger, 2017).

Effective entrepreneurial leadership is a must for the long-term survival of a startup. The efficiency of entrepreneurial leadership is evidenced by a negative relation between entrepreneurial leadership, and employee turnover intention is found. The leadership is required to understand that through entrepreneurial leadership, they can reduce employee turnover intentions. Impactful entrepreneurial leadership encourages employees to take action independently, which increases job satisfaction and employee engagement. To increase the duration of employees' work in the organization, the leadership needs to enhance their satisfaction with the organization and nurture an emotional connection between the employee and the company (Yang, Pu and Guan, 2019).

The leadership behaviour of the chief executive officer and the company's performance are the key elements that decide whether the start-up is going to survive or not. The performance of the startup and its sustainable growth depends on the humble behaviour of the chief executive officer. A humble CEO encourages employees to work hard to improve business performance and create more collaborative and easy working conditions. The modest behaviour of the CEO promotes psychological safety among the employees of the organization, and this security allows them to challenge the traditional approach and incorporate new ideas and concepts for a better outcome. This leads to the promotion of a high level of collaboration and efficient teamwork among the team members (Ren et al., 2020).

The Edtech industry in India is only rising and is now the second largest around the globe. These platforms are increasingly popular among young students to learn new skills. Some of the students still prefer the traditional mode of learning. They still feel that there is a need for the promotion of the tech platforms. Looking at the current trend, the edtech

industry is expected to do well in the future also (Mishra, 2021). Edtech startups are rising in India due to the young population, increase in the family's disposable income, lower cost of mobile internet and affordability of learning gadgets. The edtech startups in the country have disrupted the traditional coaching and competitive exam preparation sections. The pandemic was a big help for the expansion of the edtech space. Now as the effect of the pandemic is reducing and markets are opening as usual, these startups could struggle in retaining students on their platforms.

The leadership in edtech startups in the country should focus on providing students with skills that will be required in their future job roles (Sikandar, 2022). Students want campuses to keep pace with the day-to-day technology they are using. The students are going to require the knowledge and skills of these technologies when they enter the workforce. Both students and their parents want their opinion to be heard when the campuses make decisions that affect the students. The digital transformation of campuses is required and it will include the adoption of various innovative technologies to provide exceptional user experience to students. Higher education institutions will require the contribution of technology leaders to facilitate this transformation (Miller, 2019). The most efficient model when we talk about leadership in virtual learning is the transformational leadership style. This model is less efficient in a physical environment compared to a virtual setting. Teachers can use social media platforms to reduce the communication barrier between them and the students. They can use motivation as a tool. These strategies can benefit both leaders and teachers by providing them a chance to improve students satisfaction (Alotebi, Alharbi and Masmali, 2018).

Leadership style cannot be seen as an accurate tool to predict leadership competency in technological settings. A moderate correlation is found between leadership competency in technology and transformational and transactional leadership styles (Gençer and Samur, 2016). It is expected that digital education will have a positive impact on the education industry. But we are required to address a unique inequality in digital education participation. Higher education leaders can now see a long-term vision for digital learning.

3

The university networks that currently exist can be further expanded on technology for further collaboration. We do not know what the next global challenge will be but it is important to be prepared for it by increasing collaboration (Laufer, 2021). The edtech leaders should focus on how they can effectively use the technology to increase collaboration between teachers and students. As this space is dynamic, the leadership needs to learn about new and emerging technologies. It is essential to study the trends. They should be open to learning new things via seminars, webinars, training, and conferences. These leaders are required to be more open to suggestions and flexible while they make decisions. The leaders must understand that there cannot be only one solution and multiple approaches have to be explored to solve the problems they face. (Mendoza, 2021).

The tech companies have received major investments from investors, philanthropists and the government alike. This investment is due to the hope that this industry will counter the falling level of quality of education in Indian government schools. The teachers are having a hard time making sense of the ed-tech software and how to use it in a classroom setting. This is taking a lot of time and effort from the teachers. When discussions about the implementation of edtech in the classroom setting take place the opinion of teachers is not getting much importance. The point of view of teachers should be given due respect for the seamless implementation of edtech (Miglani and Burch, 2018). Technology is accepted with open arms in the field of education. It can be used to make education more inclusive for all segments of society. These platforms are essential to improve the reaction between the educator and the students. It also provides an opportunity for teachers to improve their skills. The teachers are required to be trained to get the most out of technological advancement. The drivers for the growth in education technology will be due to an increase in literacy rate and internet penetration. There is an opportunity for new players to explore this segment of the market (Mohnani 2022). The current generation of learners has a short span of attention and wants to learn things by clicking on their screens. It is important to understand that India is a very diverse country and language is one of the biggest barriers when we think about the availability of e-learning services. Another barrier to the edtech space is technology literacy. The edtech technologies are now more popular since the cost

of devices and the internet are lowA new education policy was proposed by the Government of India and this policy is considerably focused on removing this language barrier. The edtech services are required to be more personalized focusing on the needs of every individual student. The content is required to be developed in the regional languages of the country so that everyone can have equality in accessing e-learning platforms (Dutta, 2022). India ranks third when we talk about the startup economy as Indian startups are rising across industries. The startups are mostly limited to large urban centers like Mumbai, Delhi, and Bangalore, but the startup culture is now spreading to small cities. One of the key factors that are keeping this trend going is huge foreign investments as investors across the globe are interested in the startups of India. Government support is a crucial factor in developing these unicorns in edtech and fintech spaces. The ability of startups to create jobs and develop the economy cannot be overstated. These startups can contribute to the vision of the government to create a USD 5 trillion economy by the year 2024-25 (Choudhary et al. 2022). The government of India has developed various policies and initiatives for promoting business in the country. Taking notice of that, the states have also launched various initiatives to promote manufacturing. Despite the support from the government through various initiatives, startups are facing various challenges. They are struggling in organizing resources and maintaining a growth trajectory. The massive population of the country can provide the opportunity for these startups. The potential of some startups to develop in global business cannot be denied (Chaudhari 2021).

1.1.1 Edtech Startup:

Edtech startups as suggested in the study conducted by Renz & Hilbig (2020), are startups which are focused on the adoption of different technological tools like computers, laptops, other hardware applications, and different software applications including computer and mobile programs which are developed to ensure students or target customers in this market are able to access the service and get an education (which in the case can be defined as product or service offered by the company) under a fixed pay or continuous payment mode

(in fixed instalment or monthly payment till completion of the course). The growth of educational technology or tech firms has occurred during the pandemic period around the world as asserted by Renz et al. (2020). Edtech startups and institutions have been in past at well, but the growth rate has been limited due to the predominance of traditional offline institutions which catered to various demands of students and guardians. The Covid pandemic however led to restrictions and growth of fear around the world where ed-tech startups became an effective solution to ensure the continuance of education of children as well as an effective platform to learn new management and professional skills which have been closely connected with personal growth objectives. The growth of such ed-tech startups has occurred in both developed as well as developing economies, under which different attributes are under consideration due to higher level of competition and financial challenges, which needs to be reviewed. Hence, the section below has reviewed the definition and other implications of emerging markets.

1.1.2 Emerging Markets

Emerging markets have been defined by Obstfield et al. (2019) as economies which are currently experiencing a higher rate of growth and increase in population, but are also marked with a lower rate of income and investment when compared with developed countries. The countries have been termed as emerging markets based on the assumption that under the current growth rate and economic condition, such countries would become developed economies in the foreseeable future. Hence, such economies have been recipients of significant Investment around the world by different developed countries across several industries to take benefit of economic growth. Emerging economies around the world as highlighted by Tobal & Menna (2020) have not only faced economic growth but also the impacts of crisis events as well. These events have led to Swift's withdrawal of foreign funds which has impacted the financial stability of the economy. Hence, it has become important for emerging economies to grow and become sufficient to address such challenges. Sufficiency remains a major challenge due to the current higher level of poverty

as well as inequality which leads to limited development and financial inclusion despite financial growth. It can however be achieved through providing basic public services such as education and healthcare. Education is of primary importance as it leads to better economic growth chances in future. Hence, as affirmed by past studies, education remains a basic necessity which shall be provided to citizens around different emerging economies in the world. Hence it becomes important to analyze ed-tech startups which have been operating in different emerging economies around the world.

1.1.3 Edtech in Emerging Markets

The growth of ed-tech in Emerging markets was suggested in the study conducted by Cohen (2022) who suggested the major premises under such development were ensuring digital revolution and transformation is able to reach emerging economies as well as the development of an effective educational system which is at par with developed countries. Such motives saw the support of different intergovernmental and international organisations like the United Nations but carried with them a narrative of social welfare rather than a narrative of developing a profitable business venture which could be done by regional players in the industry. Passage of time as analysed by Bhardwaj et al. (2020) opened the industry for regional players who tried to address regional as well as language disparity which was not been able to be addressed by global players. Another major challenge was the lack of international educators' focus on the regional curriculum which lead to challenges among students who seemed to help in the educational curriculum and not in the development of extra skills. The market which developed for such reasons gradually developed to other streams as well and has become a self-operated and sustainable industry in several emerging economies. However, such startups face the challenge of scaling up as such requires allocation of resources and also effective planning which shall be fine through the adoption of efficient organisational leadership practices which has been reviewed in the current study.

1.1.4 Leadership

Leadership, as defined by By (2021), is leading people in an organisation towards the accomplishment of a common purpose which can be defined as the objective or vision behind the establishment of the organisation. Here, the concept of responsibility is widely acknowledged suggesting leadership is responsibility accorded to one person for ensuring the growth of the entire organisation and hence can not be tested as a privilege which is accorded to certain members based on their education, ownership of resources, and experience in different roles at the industry. This concept hence suggests leaders as people who are tasked with ensuring the growth of an organisation under different situations. The study he Crawford et al. (2020) however has defined leads as the important decision maker in the organisation, establishing a hierarchical process under which leaders who take larger and major decisions which can impact the functioning of the entire organisation are given more recognition and importance than leaders who are focussed with growth and operation of the specific department. It should be noted that these definitions have focussed upon the role played by leaders, suggesting them as the person who is connected with the entire structure itself, and making it harder to define a leader as an individual person whose role can be defined excluding the organization. However, Samimi et al. (2022) argued leaders are connected with the vision of the organization and the strategy which is expected to be followed. Such connection is essential to make leadership constant while the leaders change, which has been witnessed in different startups and larger organizations around the world. Accordingly, the importance of leadership in the ed-tech industry is discussed below:

1.1.5 The Importance of leadership in the ed-tech industry

Edtech startup leadership as defined by Hughes (2019) has primarily been carried out by educators themselves though lately have also seen the introduction of businessmen who have been more interested in finance or operation perspectives of the business. Start-up leaders in the current ed-tech ecosystem have to operate while maintaining a balance between the need and perceptions of different stakeholders, maintaining design and

technological aspects of the application, and innovation which is needed to stay ahead of the competition. Leaders also have to understand the demand of different student groups ranging from primary schools, and secondary schools, and students seeking education and currently beings at college or seeking professional education. The leadership in ed-tech startups as observed in analysing the study conducted by Alam & Mohanty (2022), suggests the presence of a transformational style of leadership at current, where the leaders have to adopt different techniques as well as data-oriented solutions which are expected to change the industry. Hence, leaders can not align them with either technological or social resources, rather have to combine both. In line with the above discussion, the impact of leadership on the growth as well as success of an organization is reviewed below.

1.1.6 Impact Of leadership on the success and growth of the organization

Theoretically, leadership when analysed by Alblooshi et al. (2021) is a major aspect behind the growth and success of the organization under the innovation ecosystem. Here, the model suggests that leadership promotes innovation and creativity which leads to the development of better products and efficient services which then results in a better value proposition for the customers, ultimately leading to a better satisfaction rate for the customers. The current model has not focused on the finance perspective but rather has been built on assumption that a greater value proposition leads to a higher rate of revenue growth, which leads to profitability and sustainability of the organization in both a shorter and longer timeframe. This model also suggests employees be under the framework as they are responsible for developing new products and services by matching innovation with practicality, which has to be managed by leaders in accordance with organizational objectives. Leadership strategies as analyzed by scholar Ojogiwa (2021) are a multidimensional attribute which focuses on several aspects from decision-making at the top level of the organization to managing employees at the factory level. Here, the focus is on both the outward perspective (managing dynamic and socio-economic challenges) and the inward perspective (challenges and concerns faced by employees). Leadership hence establishes an alignment between both internal as well as external agents in an organization

and ensures the organization operates within the ecosystem and is sustainable in long run. It should be also noted that irrespective of leadership style, each leader is focused on the growth and success of the organization. The importance of leadership style has been evident during the pandemic period as suggested in the study conducted by Lombardi et al. (2021), as they were major factors behind ensuring resilience and creativity in the organization when general perception had remained negative and required leaders to take proactive positions.

1.1.7 Challenges faced by a start-up in emerging market like India

One of the major challenges which have been faced by Start-ups in India has been financial challenge, which has been covered in the study conducted by Korreck (2019) who highlighted the challenge with pieces of evidence of limited personal finance availability, lack of mortgage to ensure finance from the banking institution, the reluctance of banking institution to finance risky technological start-ups, and underdeveloped or age finance market which together reduces the availability hence affecting the growth of start-up who may have currently been operating on cash burn model to attract customers and subsequently occupy market share and become profitable in long run. Technological start-ups as mentioned in the study conducted by Subrahmanya (2021) face the challenge regarding the development of more innovative technology by larger firms or similar startups in the industry which might lead to a reduction in market share the industry. Technology startups also face the challenge of ensuring the presence of adequate human resources who can manage different aspects of functioning from both technical as well as financial parts which when not managed adequately can impact the structure and hence has to be considered throughout the life journey of a startup. These challenges exist in other firms as well but are seen profoundly in technology startups. Despite the challenges faced by the start-up ecosystem around the country, there have been several successful startups that enjoy decent profitability rates, with growth chances and the chance to capture higher market share which leads the startup to focus on scaling whose challenges have been discussed in the section below.

1.1.8 Hindrances for scaling a start-up in an emerging market like India:

Scaling a venture is a complex task, especially in an emerging market like India and such has been observed by the study conducted by Bhargava & Gupta (2022) who suggested the primary barrier behind scaling up is the existence of significant competition in a similar industry by both national as well as regional players, who can impact the potential market share of the organisation, despite start-up making attempt to capture share. This leads to the adoption of a cash burn model, but such is not expected to sustain a longer time frame or may lead to further startups adopting similar move-ranging growth of several industries. Finance, as noted by Majumdar (2020) remains a challenge during scale-up as well. Here, it should be noted that the challenge remains less significant in absolute value from inception where there is limited revenue to show a growth rate as well. Limitations however come in form of being able to secure finance either through equity dilution or through taking debt from public institutions, as investors have to be assured of growth rate as well as have sufficient revenues to meet interest and debt obligations. This makes merger and acquisition a common phenomenon in emerging economies, where finance is held by major members of the industry. Such challenges are being addressed by the government, but personal challenges remain which have been noted in the study conducted by Pillai & Dave (2023) like courage and willingness to take risks, and the ability to manager an organization which is a common attribute to scaling up in any Industry.

1.1.9 Correlation between the scalability of a start-up & organizational leadership

A significant relationship has been established by Susilo (2020) between organizational leadership practices which are adopted by startups and the scalability aspects of the startup. This relationship is based on the fact that notwithstanding the level of innovation and availability of funds, startups need people to function and grow and such has to be motivated and positively influenced towards the achievement of organization objectives which can be done through building a collaborative and coordination-friendly culture which leads to better innovation and collaboration within the organization, which allows in the expansion of the market and hence scaling up of the startup. Another major aspect

as highlighted in the study conducted by Jegede (2020) is the effective allocation of resources in different aspects of the organization, which can be both technical, human, and financial in nature. Organizations have to ensure that these resources align and come together for effective scaling-up without leading to risks regarding the growth and survival rate of the organization if it chooses not to scale up but continue with an existing system. Here, resource allocation goes hand-in-hand with resource development through training if employees are considered. Hence, leadership practices have to focus on ensuring each stakeholder is satisfied and in alliance with organizational objectives.

1.1.10 Edtech Market Overview of India

According to Statista estimates, the Edtech industry has witnessed significant growth around the country, and is expected to reach above 10 billion dollars in 2025, and cover around 37 million paid customers at different educational institutions. Such rise is coming both from tier 1 as well as second and third-tier cities and has been considered to primarily run upon the demand to customize and personalize the courses to the perception of the students, and such rise is currently being funded by private fund organization such as venture capital and equity who are attracted to higher growth potential in the country (Hazarika et al., 2022). Such a rise as noted in the study conducted by Dhruba et al. (2022) has grown through both free as well as paid education courses. But it should be noted that smaller children have primarily been registered towards paid educational courses. Here, the parental decision shall be taken into consideration as such students are not mature enough to take decisions by themselves. The market size in 2021 has been estimated to be around 700 to 800 million dollars, but promotional and marketing are considered to lead to the upwards movement of such revenues manifold, leading to a market of 30 billion dollars in ten years. The catalyst to the current rise, as observed by Saxena (2020) has been the pandemic, where traditional modes of education were closed due to government restrictions and parent perceptions. The growth of offline educational institutions remains a challenge, but such is negated by the expected growth rate in the next decade. Hence, the major educational startups in the country are discussed below.

1.1.11 India's ed-tech startup overview

Indian ed-tech startup ecosystem has seen the rise of both large-scale as well as short-scale educational startups. Both strategies of regional focus as well as the development of nationwide content and teaching processes have found success in the country, hence the role of student and guardian perception remains significant. A piece of brief information about some major startups has been provided here. Primary among such startups have been BYJUs which is founded by Byju Raveendran. Another major startup in this sector has been Unacademy which operates through a partnership model founded by Gaurav Munjal, Roman Saini, and Hemesh Singh. Toppr and White Hat Jr are other major startups operated in a sole proprietorship model founded by Zishaan Hayath and Karan Bajaj respectively. Edtech startups have also operated primarily through a partnership model as suggested in the rise of startups such as Lido Learning, Classplus, Doubtnut, and Embibe operated and founded by Pulkit Jaiswal and Mukul Rustagi, Mukul Rustagi and Pulkit Jain, Tanushree Nagori and Aditya Shankar, and Aditi Avasthi and Mukesh Singh respectively. Thus, it can be concluded that the majority of the institution operates through a partnership or some proprietorship model with negligible instances of them becoming public limited companies due to more challenges in public operation.

1.1.12 Why start-ups fail to scale:

Startups are critical in igniting economic growth by creating jobs and assisting in the achievement of several important goals, including GDP and per capita income growth, regional and national development, exports, living standard improvements, creation of wealth, community development and skills development. Small businesses make up 98.1 percent of all businesses in the United States (US Census Bureau, 2018), making them critical to the country's economic strength. According to the Small Business Administration's Office of Advocacy, there are 30.2 million small enterprises in the United States. Small businesses account for 99.9% of all enterprises in the United States. A fascinating research result is that while a big number of small businesses start up each

month, the failure rate is high. The failure rate for new firms is about 90% as of 2019. 21.5 percent of start-ups fail in their first year, 30 percent in their second year, 50 percent in their fifth year, and 70 percent in their tenth year. There have been studies that have identified the most common causes of start-up failures. This also gives us a better understanding of why start-ups fail to scale.

For start-ups in EdTech product space, the reasons can be broadly divided into four categories and they are

(1) Product related issues (such as no demand of the product, product-market fitment related issues, pricing or costing issue, product not user friendly, product is not stable etc.),

(2) Finance & legal related issues (such as shortage of working capital, no investor's interest, disharmony with the investors, legal & compliance related challenges etc.),

(3) Go-to-market related issues (such as product without a business model, poor marketing initiatives, ignoring customer feedback, failed geo-expansion, lack of networking etc.) and

(4) Organizational behavior & leadership related issues (such as not the right team, losing focus, disharmony among the team members, lack of passion, burn out, failure to pivot, pivot gone bad etc.).

Understanding the pain points of business performance is crucial to startup leadership. It's about putting in the effort to come up with new ways to address challenges and developing a productive work atmosphere. Being a leader is defined by the attitude one brings to work each day and the core values one holds. A leader is defined by a combination of skill, analysis, gut instinct, and the willingness to put oneself out there. When we combine these qualities with self-confidence, we get the perfect recipe for the type of leadership that can help a startup flourish. The role of leadership in startups includes encouraging teams to

increase morale, risk assessment, the art of investment, building a positive culture, foreseeing opportunities and structural as well as personal issue solving.

This research reviewed existing definitions of start-ups and found that most of them use the age of the firm as a criterion for determining whether a company is a start-up. As a result, a time frame of 5 to 12 years has been chosen, which correlates to prior study investigations (Bruneel et al., 2010; Pellegrino et al., 2012; Salomo et al., 2008). In general (there may be exceptions), leadership behavior is critical in these young organizations with limited processes, structures, and routines. All employees are motivated by the leadership, who intellectually stimulate them and direct them toward the company's goal(s).

1.2 Research Problem:

The rise and presence of Edtech companies in India is more and more evident in recent years. Edtech startups have enjoyed exponential growth in recent years. The pandemic has also contributed greatly to their rise. These startups have changed the modus operandi for the coaching and exam preparation centers. They are now increasingly eager to acquire these coaching centers like Byju's acquired Akash. During the pandemic, classroom learning is completely abandoned. The edtech startups are still significant even after the pandemic. These startups are fulfilling the learning needs of both coaching and the classroom. The most popular platform for e-learning in India is Unacademy followed by Doubtnut, Gradeup, and Topper. The probability of these edtech companies continuing instead of traditional learning has increased. This system of e-learning is going to challenge established physical learning (Godha and Sharma 2021).

There is no denying that education technology is a coming trend. People choose to learn in their place and in their own time. The popularity of edtech is evident among students. The trend of growth of Edtech companies operating in India is expected to be continued (Bargavi, R. and Shanmugam, 2022). The trend of shifting from traditional classrooms to virtual is likely to continue. The current popularity of these platforms and government policies provide enough evidence. A transformation is seen in terms of the availability of

infrastructure essential for virtual classrooms. This trend is similar in urban as well as rural areas (Nag, 2022). This field is expanding in India as more and more companies are competing to seek the attention of students and parents alike. The common wisdom is that these startups are heavily dependent on private funding and a significant number of them are loss-making. There are also reports of mis selling their products to students by Indian Edtech startups. Recently layoffs are seen in Indian startups but it is most prominent in the edtech segment (Upadhyay and Pathak, 2022). Commenting on the challenges of entrepreneurship in the edtech industry, Venkat and Benerjee (2021), stated that managing the expectation of numerous stakeholders is difficult for entrepreneurs in the edtech space. These stakeholders are owners of the school, its management, staff and school administration, and parents and students. The only concern of the parents is that their children get employed. The desired outcome for school management is for their students to perform in the board examination. The directors of schools are generally not very keen to risk trying new innovative technology. Another concern regarding edtech entrepreneurs is their inability to engage with academicians. They do not have a good understanding of day-to-day functioning of schools. As a result, they do not consider this while designing their products. The collaboration between them and the stakeholders in the school ecosystem is very limited. The infrastructure challenges are needed to be overcome for the expansion of edtech in schools in India. There is another concern of low profitability and this affects the long-term survival of the edtech companies. They need more funding from investors to sustain themselves in this competitive industry.

The academicians have shown great interest in leadership and leadership styles in context of both India and global. Different leadership styles are suggested depending on the size and industry of the startups. However, their interest in specific segments of Edtech is limited. There is a gap in literature in the context of leadership on performance and expansion of Indian Edtech startups.

1.2.1 Research Gaps:

Bass (1995) established the full-range leadership (FRL) paradigm, which is one of the most acknowledged leadership theories (Westerlaken and Woods, 2013). The relationship between the leader and the follower is the emphasis of the model. It does so by identifying three forms of leadership: (1) transformational leadership, (2) transactional leadership and (3) laissez-faire leadership. Transformational leadership is the most effective and active type of leadership, whereas Transactional leadership focuses on medium efficacy and activity, whereas laissez-faire leadership is the least effective and passive type of leadership (Bass, 1995).

Transformational leaders compel their supporters to follow them by expressing an exciting vision of the future, typically through symbols and emotional appeals. Furthermore, these leaders demonstrate respect for their followers and are truly concerned about their personal growth and development (Bass and Bass, 2008), by giving them with opportunity to learn new skills and abilities and by encouraging them to think about problems in new ways (Ayman et al., 2009). Their social interactions with their followers are built on coaching or mentoring relationships, in which the leader assumes responsibility for the follower's growth and development (Bass and Avolio, 1993). Transformational leaders try new things, look for possibilities even when they're risky, choose effective over efficient solutions, and are less likely to stick with the status quo.

Regardless matter whether the studied organizations were start-ups or existing firms, many empirical studies have found a positive association between transformational leadership behavior and various performance metrics (e.g. Gumusluoglu and Ilsev, 2007; Walumbwa et al., 2008; Wang et al., 2011b). The results are somewhat confusing and difficult to interpret at the organizational level (Wang et al., 2011a).

The varying situations in which the various research works were conducted may explain the contradictory outcomes. Context elements such as business development or company structure are likely to have a substantial impact on leadership and its consequences (Lowe

17

and Gardner, 2000; Porter and McLaughlin, 2006; Shamir and Howell, 1999). In the EdTech product space, how leadership impacts organizational scalability and long-term sustenance has not been researched in depth (in emerging economy like India). Therefore, this research has given a deep dive extensively into this topic.

Leadership has a clear cause and effect link with the success of startups. Values, culture, change tolerance, and employee motivation are all determined by leaders. They influence strategy development, as well as its execution and efficacy. Leaders can be found at any level of an organization, not just in management. Successful leaders, on the other hand, share one trait. They persuade those around them to get the most out of the organization's resources, especially its most valuable and costly asset: its people. Turnover, customer satisfaction, profit, productivity, and other factors are all influenced by leaders. Employee engagement and enthusiasm are fostered by good leadership, which leads to increased levels of customer loyalty, service excellence, innovation etc. – all eventually lead to business profitability.

In this research, the intention is to go deeper into the IMPACTS of strong leadership (transactional, contextual & visionary leaderships) on scaling startups successfully. The segment it will focus is the startups in EdTech Product space and the samples would be broadly concentrated on emerging markets (such as India) where there is a boom of EdTech startups.

Global EdTech market size was valued at USD 74.64 billion in 2019 (GLOBE NEWSWIRE, Delaware, May 24, 2021) and is reckoned to witness a compound annual growth rate of 19.9% over the next seven years to be remunerated at USD 318.8 billion by the year 2027. India has around 3,500 EdTech startups. India's EdTech industry is poised to become $30 billion in size in the next 10 years (RBSA Advisors, 2021). The current market size is about $700-800 million. The industry has attracted private equity investments of $4 billion in the last five years, leading to the emergence of global Edtech leaders like Byju's which now commands a valuation of $15 billion. This research aims to

focus on the leadership behavior in a start-up (especially in EdTech product space) in emerging markets like India.

1.3 Purpose of the research

1.3.1 Aims and Objectives:

The primary aim of the current study is to examine the significant impact of leadership in the expansion of start-ups in the Ed-Tech sector within emerging markets such as India.

Keeping in mind the aim of the study, this study will try to achieve the following specific objectives in its duration.

- To identify the role of leadership in business growth and performance in context to Indian Ed-tech startups

- To determine the main components of leadership effectiveness that contributes to the scaling of start-ups and specifically Indian Ed-tech startups

- To analyze the impact of strong leadership on the scaling of start-ups and specifically Indian Ed-tech startups

1.3.2 Research Questions:

1.   What is the role of leadership in business growth and performance in context to Indian Ed-tech startups?

2.   What are those main components of leadership effectiveness that contribute to the scaling up of start-ups (specifically Indian Ed-tech startups)?

3.   How does strong leadership impact the scalability of Indian Ed-tech startups?

1.4 Thesis Structure:

The chapter scheme that will be followed for this thesis is as follows.

Chapter 1: Introduction

This chapter will discuss the background of study, research problem, aims and objectives, contribution of the study and thesis structure.

Chapter 2: Review of Literature

This chapter will discuss existing literature on start up business, edtech industry, influence of leadership on scaling, research gap, conceptual framework, hypothesis development and a summary of the entire chapter.

Chapter 3: Research Methodology

The chapter 3 will discuss research paradigm, research approach, research design, data collection method, population and sampling, data analysis and interpretation and ethical consideration.

Chapter 4: Data Analysis

This chapter will discuss the statistical analysis performed.

Chapter 5: Results and Discussion

Here the result of statistical data analysis will be discussed.

Chapter 6: Conclusion and Recommendation.

1.5 Case Studies:

To understand the real impact of leadership to an ed-tech startup in emerging market, various studies were conducted mostly in the form of unstructured interviews with the leadership team and their employees. Some of the interesting findings are tabulated below:

1.5.1 Byju's:

Byju's is an Indian edtech company that provides online learning services to students from kindergarten to undergraduate level. The company was founded in 2011 by Byju Raveendran, who is a former teacher and has a degree in mechanical engineering. Byju's started as a coaching institute for competitive exams like CAT, GRE, and GMAT, but later expanded to offer a variety of learning products for school students. Byju's learning products include interactive video lessons, practice quizzes, and personalized support from teachers. The company's flagship product is the Byju's Learning App, which has over 100 million users and offers courses in a range of subjects, including mathematics, science, social studies, and English. Byju's also offers live online tutoring and test preparation courses for exams like JEE, NEET, and IAS. Since its founding, Byju's has become one of the largest edtech companies in the world, with a valuation of over $16 billion. The company has raised funding from some of the biggest investors in the world, including the Chan Zuckerberg Initiative, Tencent, and Sequoia Capital. Byju's has also expanded internationally, with operations in the United States, the United Kingdom, Australia, the Middle East, and Southeast Asia.

Leadership has played a critical role in the scalability of Byju's. Here are some key ways in which leadership has impacted Byju's scalability:

Vision and Strategy: Byju's founder and CEO, Byju Raveendran, has been instrumental in developing a clear and compelling vision for the company, which is to make quality education accessible to students across India and the world. This vision has been supported by a well-crafted strategy that focuses on delivering engaging and interactive learning experiences to students through technology.

Innovation and Adaptability: Byju's has been able to stay ahead of the curve by constantly innovating and adapting to changing market trends and customer needs. This has been made possible by the company's leadership team, which has fostered a culture of experimentation and risk-taking.

Talent Management: Byju's has been able to attract and retain top talent, thanks to its strong leadership team. Byju Raveendran and his team have made employee engagement and development a top priority, which has helped the company build a highly skilled and motivated workforce.

Investor Relations: Byju's has been able to secure funding from some of the biggest investors in the world, thanks to its strong leadership team. Byju Raveendran and his team have been successful in building strong relationships with investors and communicating the company's vision and strategy effectively.

Execution Excellence: Byju's has been able to execute its vision and strategy with excellence, thanks to its strong leadership team. The company has been able to build a robust technology platform, develop engaging learning products, and enter new markets with ease, all due to the effective leadership and management of the company.

Overall, leadership has played a crucial role in the scalability of Byju's. The company has been able to build a strong brand, attract top talent, secure funding, develop innovative products, and execute with excellence, all due to the strong leadership and management of the company. As Byju's continues to grow, leadership will remain a critical factor in its success. Byju's leadership style is primarily characterized by visionary and transformational leadership. Here are some key traits and practices that are evident in Byju's leadership style:

Visionary Leadership: Byju's founder and CEO, Byju Raveendran, is known for his visionary leadership style. He has a clear and compelling vision for the company, which is to make quality education accessible to students across India and the world. He has also

articulated a well-crafted strategy that focuses on delivering engaging and interactive learning experiences to students through technology.

Transformational Leadership: Byju's leadership team has been successful in creating a culture of innovation and experimentation, which has been crucial in the company's success. They have fostered a sense of ownership and accountability among employees, encouraging them to take risks and come up with new ideas to drive the company's growth.

Empowerment and Collaboration: Byju's leadership team has empowered employees to take ownership of their work and collaborate with each other to achieve common goals. They have created a flat organizational structure that encourages open communication and feedback, which has helped the company stay nimble and responsive to changing market conditions.

Customer-Centricity: Byju's leadership team is known for their customer-centric approach to business. They have a deep understanding of their target audience and work closely with customers to understand their needs and preferences. This has helped the company develop products and services that are tailored to the specific needs of their customers.

Agility and Adaptability: Byju's leadership team has been successful in driving agility and adaptability in the company. They have been quick to respond to changing market conditions and customer needs, and have been able to pivot the company's strategy and direction as needed to stay ahead of the curve.

Overall, Byju's leadership style is characterized by visionary and transformational leadership, with a strong emphasis on empowerment, collaboration, customer-centricity, agility, and adaptability. These leadership traits and practices have been crucial in the company's success in the highly competitive edtech industry.

1.5.2 UpGrad:

UpGrad is an Indian edtech company that provides online learning programs for working professionals. The company was founded in 2015 by Ronnie Screwvala, Mayank Kumar, Ravijot Chugh, and Phalgun Kompalli. UpGrad offers a range of courses in fields such as data science, digital marketing, product management, entrepreneurship, and software engineering. UpGrad's courses are designed to be flexible and accessible to working professionals, with most courses lasting between 3-12 months and offering a mix of online video lectures, live webinars, and assignments. The company also offers career support and mentoring to help students transition into new roles or advance their careers. UpGrad has partnerships with several universities and institutions, including the Indian School of Business, Duke Corporate Education, and Liverpool John Moores University. The company has also raised significant funding from investors such as Temasek, IIFL, and Bertelsmann India Investments, and has grown rapidly since its inception, serving over 1 million learners from over 50 countries.

The leadership impacts: Leadership has played a significant role in UpGrad's scalability. The founding team, led by Ronnie Screwvala, has been instrumental in building the company's brand and reputation in the Indian edtech market. Some of the key ways in which leadership has impacted UpGrad's scalability include:

> **Vision and Strategy:** The founding team at UpGrad has been able to develop a clear vision and strategy for the company's growth. They have identified key opportunities in the Indian edtech market and have been able to develop courses and programs that are aligned with the needs of the job market. This has helped to attract more students to the company's programs and fueled its rapid growth.

> **Talent Management:** UpGrad's leadership team has been able to attract and retain top talent, which has helped to ensure the quality of the company's courses and programs. The company's faculty members and industry experts are some of the

best in their respective fields, which has helped to build the company's reputation and attract more students.

Innovation and Adaptability: UpGrad's leadership team has been able to stay ahead of the curve in terms of innovation and adaptability. The company has been able to pivot quickly in response to changing market conditions and has been able to develop new courses and programs to meet emerging needs. This has helped to keep the company relevant and attractive to students.

Brand Reputation and Marketing: UpGrad's leadership team has been able to build a strong brand reputation and marketing strategy. The company has been able to leverage its partnerships and affiliations, as well as its founder's reputation, to establish itself as a leading player in the Indian edtech market. This has helped to attract more students to the company's courses and fueled its rapid growth.

In summary, UpGrad's leadership team has played a critical role in the company's scalability by developing a clear vision and strategy, attracting and retaining top talent, staying ahead of the curve in terms of innovation and adaptability, and building a strong brand reputation and marketing strategy.

The leadership style:

The leadership style in UpGrad can be described as a transformational leadership style. Transformational leadership is a leadership approach that focuses on inspiring and motivating followers to achieve their full potential and to work towards a common goal. Some of the key characteristics of transformational leadership that are visible in UpGrad's leadership style include:

Visionary: UpGrad's leadership team has a clear vision for the company's growth and has been able to inspire and motivate employees to work towards achieving that vision.

Inspirational: The leadership team at UpGrad has been able to inspire and motivate employees to work towards the company's goals. They have been able to communicate their vision and values in a way that inspires employees to give their best efforts.

Supportive: The leadership team at UpGrad is supportive of their employees and provides them with the resources and tools they need to succeed. They prioritize the development and growth of their employees, and provide training and mentorship programs to help them achieve their full potential.

Innovative: UpGrad's leadership team is innovative and encourages employees to think creatively and come up with new ideas. They are open to new ideas and are willing to take risks in order to stay ahead of the curve.

Overall, the transformational leadership style in UpGrad has been instrumental in the company's rapid growth and success, by inspiring and motivating employees to work towards a common goal and by fostering a culture of innovation and creativity.

1.5.3 Simplilearn:

Simplilearn is one of the leading edtech companies in India, offering a wide range of professional certification courses and training programs to individuals and enterprises. The company has a strong presence in the Indian market and has been able to establish itself as a trusted brand in the online education space. Some of the key features of Simplilearn's India business include:

Wide range of courses: Simplilearn offers courses in various domains such as digital marketing, data science, cybersecurity, cloud computing, project management, and many more. The company partners with leading universities and industry organizations to offer globally recognized certifications to its learners.

Blended learning approach: Simplilearn's unique blended learning approach combines online self-paced learning with live instructor-led training, giving learners the flexibility to learn at their own pace while also getting access to expert guidance and support.

Strong industry partnerships: Simplilearn has partnered with leading industry organizations such as Microsoft, Google, and Salesforce to offer industry-recognized certifications to its learners. These partnerships help to ensure that Simplilearn's courses are up-to-date and aligned with the needs of the job market.

Corporate training: Simplilearn also offers customized training solutions to enterprises, helping them to upskill their employees and stay ahead of the competition. The company has worked with over 1,500 corporate clients across various industries.

Career services: Simplilearn provides career services such as resume building, interview preparation, and job assistance to help learners land their dream job. Overall, Simplilearn's India business has been able to capitalize on the growing demand for online education in India and establish itself as a leader in the edtech space. The company's focus on offering high-quality courses and strong industry partnerships has helped it to attract a large and loyal customer base in India.

How has leadership helped Simplilearn's business to scale fast in India?

Leadership has played a crucial role in Simplilearn's rapid growth and success in India. The company's leadership team, led by founder and CEO Krishna Kumar, has demonstrated a number of key leadership qualities that have helped to drive the company's growth. Some of the ways in which leadership has contributed to Simplilearn's fast-scaling business in India include:

> **Visionary leadership:** Krishna Kumar has a clear vision for Simplilearn's growth and success, and has been able to inspire and motivate his team to work towards achieving that vision. His focus on innovation and customer-centricity has helped Simplilearn to stay ahead of the curve in the highly competitive edtech market.

Agile leadership: Simplilearn's leadership team has demonstrated an agile approach to business, quickly adapting to changing market conditions and customer needs. The company has been able to pivot its business model and product offerings as needed, while remaining true to its core values and mission.

Collaborative leadership: The leadership team at Simplilearn encourages collaboration and teamwork, both within the company and with external partners. This has helped to foster a culture of innovation and creativity, and has allowed Simplilearn to develop strong partnerships with leading universities and industry organizations.

Customer-focused leadership: Simplilearn's leadership team is highly customer-focused, with a strong emphasis on understanding the needs and pain points of its learners. This customer-centric approach has helped the company to develop high-quality courses and training programs that are tailored to the needs of its learners.

Data-driven leadership: The leadership team at Simplilearn uses data and analytics to inform its decision-making and drive business growth. This data-driven approach has helped the company to identify new opportunities for growth and optimize its marketing and sales strategies.

Overall, the leadership at Simplilearn has been instrumental in driving the company's fast-scaling business in India. By demonstrating visionary, agile, collaborative, customer-focused, and data-driven leadership, the company's leadership team has been able to inspire and motivate its employees, develop innovative products and services, and build strong partnerships with key stakeholders.

1.5.4. Toppr:

Toppr is an Indian edtech company that offers a personalized learning platform for students from classes 5 to 12. The company's business model is based on a subscription-based model, where students and parents pay a fee to access the platform's content and services.

Toppr's platform is designed to help students prepare for various competitive exams, such as IIT-JEE, NEET, and AIIMS, among others. The platform offers a wide range of learning resources, including video lectures, practice questions, study materials, and mock tests, among others. The company uses artificial intelligence and machine learning algorithms to provide personalized learning experiences to its users. Toppr's business model involves charging a subscription fee to access its platform and services. The company offers different subscription plans, with varying levels of access to its content and services. Students and parents can choose the plan that best suits their needs and budget. In addition to its subscription-based model, Toppr also generates revenue through partnerships with schools and coaching institutes. The company offers its platform and services to these institutions, allowing them to provide personalized learning experiences to their students. Overall, Toppr's business model is built on the premise of providing high-quality, personalized learning experiences to students across India. The company's subscription-based model and partnerships with schools and coaching institutes have helped it to generate significant revenue and scale its business rapidly in the highly competitive edtech market in India.

Leadership has played a critical role in scaling Toppr's business in India. The company's leadership team, led by founder and CEO Zishaan Hayath, has demonstrated several key leadership qualities that have helped to drive the company's growth. Here are some ways in which leadership has impacted Toppr's business:

Visionary leadership: Toppr's leadership team has a clear vision for the company's growth and success. This vision has helped to guide the company's strategy and decision-making, enabling it to stay focused on its core mission of providing high-quality, personalized learning experiences to students across India.

Innovative leadership: The leadership team at Toppr is highly innovative and has been able to develop new and innovative solutions to address the needs of its users. The company's use of artificial intelligence and machine learning algorithms to provide personalized learning experiences is an example of its innovative approach.

Customer-focused leadership: The leadership team at Toppr is highly customer-focused and is committed to understanding the needs of its users. This customer-centric approach has helped the company to develop a deep understanding of its users' needs and preferences, enabling it to provide tailored solutions that meet their specific requirements.

Collaborative leadership: Toppr's leadership team is highly collaborative, both internally and externally. The company has developed strong partnerships with schools and coaching institutes, enabling it to expand its reach and provide its services to a wider audience.

Data-driven leadership: The leadership team at Toppr is highly data-driven and uses analytics to inform its decision-making. The company's use of data to understand user behavior and preferences has helped it to develop more targeted marketing strategies and improve the overall user experience.

Overall, the leadership team at Toppr has been instrumental in driving the company's growth and success in India. By demonstrating visionary, innovative, customer-focused, collaborative, and data-driven leadership, the company's leadership team has been able to build a strong brand and scale its business rapidly in the highly competitive edtech market in India.

1.5.5 Educomp:

Educomp Solutions Limited is an Indian educational technology company that operates through a hybrid business model, combining both B2B and B2C segments. The company offers a wide range of products and services aimed at improving the quality of education in India, ranging from e-learning solutions to consulting services. Educomp's B2B segment primarily involves providing educational solutions to schools, colleges, and other educational institutions. The company's products and services in this segment include smart classrooms, e-learning content, teacher training programs, and educational consulting services. Educomp works closely with educational institutions to understand their specific needs and provides customized solutions that help them improve their teaching and learning outcomes. Educomp's B2C segment primarily involves providing online education

services to students and parents. The company's flagship product in this segment is called "SmartClass," which provides online learning resources, such as video lectures, interactive quizzes, and assessments, to students from classes 1 to 12. Educomp also offers online tutoring services and test preparation courses for various competitive exams, such as IIT-JEE and NEET, among others. In addition to its B2B and B2C segments, Educomp also generates revenue through partnerships with governments and other organizations. The company has worked with several state governments in India to implement educational reforms and improve the quality of education in their respective states. Overall, Educomp's business model is aimed at improving the quality of education in India through the use of technology and innovative solutions. The company's hybrid business model, combining both B2B and B2C segments, has helped it to diversify its revenue streams and reach a wider audience in the highly competitive edtech market in India.

Impact of leadership on Educomp's growth in early years:

Leadership has played a crucial role in the growth of Educomp Solutions Limited in India. The company's founder and former CEO, Shantanu Prakash, is widely regarded as a visionary leader who has been instrumental in shaping the direction and strategy of the company over the years. Here are some ways in which strong leadership has impacted Educomp's growth:

> **Visionary leadership:** Shantanu Prakash has a clear vision for Educomp's growth and success. He has been able to articulate this vision to his team and stakeholders, inspiring them to work towards a common goal. Under his leadership, Educomp has focused on using technology and innovative solutions to improve the quality of education in India, which has helped the company to differentiate itself from its competitors.

> **Entrepreneurial leadership:** Shantanu Prakash is an entrepreneurial leader who is not afraid to take risks and explore new opportunities. He has been able to identify

31

new markets and business opportunities for Educomp, which has helped the company to diversify its revenue streams and expand its reach.

Collaborative leadership: Shantanu Prakash has fostered a culture of collaboration within Educomp, encouraging his team to work together towards common goals. This collaborative approach has helped the company to develop strong partnerships with schools, colleges, and other educational institutions, enabling it to provide more comprehensive solutions to its customers.

Customer-focused leadership: Shantanu Prakash has been highly customer-focused in his approach to leadership. He has emphasized the importance of understanding the needs and preferences of Educomp's customers and has encouraged his team to develop solutions that meet those needs.

Strategic leadership: Shantanu Prakash has been highly strategic in his approach to leadership, taking a long-term view of Educomp's growth and success. He has been able to anticipate changes in the market and adapt Educomp's strategy accordingly, which has helped the company to stay ahead of its competitors.

Overall, strong leadership has been critical to Educomp's growth and success in India. By demonstrating visionary, entrepreneurial, collaborative, customer-focused, and strategic leadership, Shantanu Prakash has been able to build a strong brand and scale Educomp's business rapidly in the highly competitive edtech market in India.

Impact of leadership on Educomp's decline in recent past:

The leadership at Educomp Solutions Limited played a crucial role in the company's decline and eventual de-growth. Here are some ways in which the leadership impacted Educomp's de-growth:

Lack of strategic vision: The leadership at Educomp failed to provide a clear strategic vision for the company's growth and success. The company's expansion

plans were overly ambitious and lacked a clear roadmap for implementation. This lack of strategic direction contributed to the company's inability to compete effectively in the market.

Poor financial management: The leadership at Educomp failed to manage the company's finances effectively, resulting in a significant debt burden that the company was unable to service. This lack of financial discipline contributed to the company's decline and eventual de-growth.

Failure to adapt to changing market dynamics: The leadership at Educomp was slow to adapt to the changing market dynamics in the edtech sector in India. The company failed to anticipate the growing demand for online and personalized learning solutions, which resulted in a decline in its market share and revenues.

Management issues: The leadership at Educomp faced several management issues, including a lack of coordination among different business units, high levels of employee turnover, and a leadership vacuum. These issues contributed to the company's decline and its inability to compete effectively in the market.

Overall, the leadership at Educomp played a significant role in the company's de-growth. The lack of strategic vision, poor financial management, failure to adapt to changing market dynamics, and management issues all contributed to the company's decline and eventual collapse.

1.5.6 Extramarks:

Extramarks is an edtech company in India that offers digital learning solutions to students from K-12. The company's business model involves creating interactive and engaging digital content, such as videos, animations, and games, and delivering them through its learning management system. Here are some key aspects of Extramarks' business model: 1) Content Creation: Extramarks creates digital content for various subjects and classes, including videos, animations, and games. The company's content is designed to be

interactive and engaging, with a focus on making learning fun and effective. 2) Learning Management System: Extramarks' learning management system (LMS) is the platform through which students access the company's digital content. The LMS is designed to be user-friendly and intuitive, with features such as personalized learning paths, progress tracking, and adaptive assessments. 3) B2B and B2C: Extramarks offers its digital learning solutions to both B2B and B2C customers. The company partners with schools and educational institutions to provide its solutions to students as part of their regular curriculum. At the same time, Extramarks also offers its solutions directly to students and parents, who can access the content through the company's online store. 4) Adaptive Learning: Extramarks' digital content is designed to be adaptive, meaning that it can adjust to the student's learning pace and style. The company uses data analytics and machine learning algorithms to identify the student's strengths and weaknesses and provide personalized recommendations for further learning. 5) Test Preparation: In addition to regular curriculum content, Extramarks also offers test preparation solutions for competitive exams such as NEET, JEE, and Olympiads. The company's test preparation solutions include practice tests, mock exams, and video lectures, among other things. Overall, Extramarks' business model focuses on providing engaging and effective digital learning solutions to students from K-12. The company's content creation, learning management system, adaptive learning, and test preparation solutions are key components of its business model.

Impact of leadership:

Extramarks' consistent and steady growth can be attributed to the strong leadership of the company's management team. Here are some ways in which the leadership has impacted Extramarks' growth:

1) **Strategic vision:** The leadership at Extramarks has provided a clear strategic vision for the company's growth and success. The company's expansion plans have been well thought out and executed, with a focus on innovation and customer satisfaction.

2) Innovation: Extramarks' leadership has fostered a culture of innovation within the company. The company has continuously invested in research and development to create new and improved digital learning solutions for its customers. This focus on innovation has helped Extramarks stay ahead of the competition and maintain its market leadership.

3) Customer focus: The leadership at Extramarks has placed a strong emphasis on customer satisfaction. The company's digital learning solutions are designed to meet the specific needs and requirements of its customers, with a focus on delivering personalized and adaptive learning experiences.

4) Talent management: The leadership at Extramarks has been successful in attracting and retaining top talent in the edtech industry. The company's management team has created a supportive and empowering work environment, which has helped in building a highly skilled and motivated workforce.

5) **Financial management:** The leadership at Extramarks has managed the company's finances effectively, ensuring that it has the resources needed to invest in growth and innovation. This has helped the company maintain a strong financial position, even during times of market uncertainty.

Overall, the leadership at Extramarks has played a critical role in the company's consistent and steady growth. The leadership's strategic vision, focus on innovation and customer satisfaction, talent management, and financial management have all contributed to the company's success.

1.5.7 Unacademy:

Unacademy is an Indian online learning platform that provides educational content to students through live classes, video lectures, and other resources. The company offers a variety of courses, including those focused on test preparation, skill development, and general academic subjects. Unacademy's business model is based on a combination of free and paid offerings. The platform offers many free classes, which are available to anyone

who creates an account on the platform. These classes are typically introductory or designed to promote interest in a particular course or subject. In addition to its free classes, Unacademy also offers a range of paid courses, which provide more in-depth instruction and often include additional resources such as study materials and mock tests. Students can purchase these courses individually or subscribe to Unacademy's Plus program, which provides access to a wider range of courses and resources for a monthly or annual fee. Unacademy generates revenue primarily through the sale of its paid courses and subscriptions, as well as through advertising and sponsorship deals with companies and brands that are interested in reaching its student audience. The company has also raised funding from investors, including venture capital firms and strategic partners, to support its growth and expansion efforts.

Unacademy has a number of leaders who have played important roles in the company's growth and success. Here are a few key leaders and their leadership styles and impact:

Gaurav Munjal, Co-Founder and CEO: Gaurav Munjal is one of the co-founders of Unacademy, and has played a critical role in shaping the company's vision and strategy. Munjal is known for his entrepreneurial spirit and his ability to build and scale successful businesses. Under his leadership, Unacademy has grown rapidly, and has become one of the leading online learning platforms in India.

Roman Saini, Co-Founder and CMO: Roman Saini is another co-founder of Unacademy, and is responsible for the company's marketing and branding efforts. Saini is a former IAS officer, and brings a unique perspective to the company's leadership team. He is known for his passion for education and his ability to connect with students and learners.

Hemesh Singh, Co-Founder and CTO: Hemesh Singh is the co-founder and CTO of Unacademy, and is responsible for the company's technology and product development efforts. Singh is a former software engineer at Flipkart, and brings extensive experience in building and scaling technology platforms. Under his

leadership, Unacademy has launched a number of innovative new products and features.

Vivek Sinha, Chief Strategy Officer: Vivek Sinha joined Unacademy in 2019, and is responsible for the company's corporate strategy and business development efforts. Sinha has extensive experience in the education and technology sectors, and has helped to drive Unacademy's expansion into new markets and verticals.

Prabhav Phalgun, Vice President - Content: Prabhav Phalgun joined Unacademy in 2016, and is responsible for the company's content strategy and development efforts. Phalgun has a background in education and content creation, and has helped to build a robust library of educational content on the Unacademy platform.

Each of these leaders brings a unique set of skills and experiences to the Unacademy team. Their leadership styles are focused on innovation, collaboration, and a strong user focus. Together, they have helped to build a culture of innovation and excellence at Unacademy, and have positioned the company for continued growth and success in the future.

1.6 Variable identified for the Thesis:

Variable identification is a crucial aspect of any thesis or research study, as it helps to ensure that the study is focused, well-structured, and able to effectively answer the research questions. Here are some reasons why variable identification is so important in thesis: 1) It helps to define the scope of the study: By identifying the variables that will be studied, researchers can define the scope of the study and determine what specific aspects of the research topic will be examined. This helps to ensure that the study is focused and does not become too broad or unfocused. 2) It helps to formulate research questions and hypotheses: Once the variables have been identified, researchers can formulate specific research questions and hypotheses that will guide the study. This helps to ensure that the study is well-structured and that the research questions are relevant and answerable. 3) It helps to ensure validity and reliability: Identifying variables that are relevant to the research topic and that can be measured accurately is crucial for ensuring the validity and reliability of

the study. This helps to ensure that the results of the study are accurate and can be trusted. 4) It helps to guide data collection and analysis: Once the variables have been identified, researchers can determine what data will need to be collected and how it will be analyzed. This helps to ensure that the study is well-designed and that the data collected will be relevant to the research questions. Overall, variable identification is a critical step in the research process, as it helps to ensure that the study is focused, well-structured, and able to effectively answer the research questions. By carefully identifying the variables that will be studied, researchers can ensure that their study is valid, reliable, and relevant to the research topic.

Dependent variables:

EdTech Business scaling performance (Sales Revenue & profit)

Independent variables:

Many businesses have struggled to compete with global competition throughout the years. The majority of those who did succeed were unable to maintain their market position. With their vision, unwavering commitment, and unwavering hard work, leaders like Steve Jobs, Elon Musk, and Richard Branson have led their individual enterprises to unprecedented heights. They provided the world of business a new dimension with their belief and strong leadership qualities. It is not easy to be a good leader. Effective leadership characteristics are necessary for achieving greater goals and objectives. Whether it is Mahatma Gandhi's resistance and perseverance or Elon Musk's vision.

For a successful & scalable start-up venture in EdTech Product Space, the identified 25 attributes of strong leadership are 1) Integrity, 2) Innovation, 3) Honesty, 4) Active Listening, 5) Self-confidence, 6) Vision, 7) Strong Communication, 8) Delegation Skills, 9) Decision Making Ability, 10) Problem Solving Skills, 11) Fair Attitude, 12) Inquisitiveness, 13) Self-motivation, 14) Humility, 15) Care for others, 16) Self-Discipline, 17) Emotional Intelligence, 18) Passion, 19) Resilience, 20) Accountability, 21) Supportiveness, 22) Tech Savvy, 23) Empathy, 24) Agility & 25) Empowerment.

However, leadership attributes like **Adaptability, Strong Communication, Interpersonal skills, Creativity, and Decision-Making (Schuetz, 2016; Lacerda, 2015)** will be considered as the key leadership attributes basis which the Hypotheses would be developed.

1.6.1 Hypotheses Development:

Hypothesis development is an essential aspect of any thesis, as it provides a framework for the research study and helps to guide the data collection and analysis process. A hypothesis is a statement that predicts the relationship between two or more variables and provides a tentative explanation for the observed phenomenon. Developing a hypothesis helps to clarify the research questions and provides a testable framework for the study. By formulating a hypothesis, the researcher can develop a clear understanding of the variables that will be studied and the expected outcomes. This helps to guide the data collection and analysis process, as the researcher can focus on collecting data that will either support or refute the hypothesis. Overall, hypothesis development is important in thesis because it helps to provide a clear and focused research framework, guide the data collection and analysis process, and ultimately leads to more valid and reliable research outcomes. For this research, the following EIGHT Hypotheses have been developed for this research:

*H1: **Adaptability** as a leadership attribute in scaling start-ups does not have a significant impact on Ed-tech businesses scaling performance*

*H2: **Strong communication** as a leadership attribute in scaling start-ups does not have a significant impact on Ed-tech businesses scaling performance*

*H3: **Interpersonal skills** as a leadership attribute in scaling start-ups do not have a significant impact on Ed-tech businesses scaling performance*

*H4: **Creativity** as a leadership attribute in scaling start-ups does not have a significant impact on Ed-tech businesses scaling performance*

*H5: **Decision Making** as a leadership attribute in scaling start-ups does not have a significant impact on Ed-tech businesses scaling performance*

H6: Self-Discipline as a leadership attribute in scaling start-ups does not have a significant impact on Ed-tech businesses scaling performance

H7: Resilience as a leadership attribute in scaling start-ups does not have a significant impact on Ed-tech businesses scaling performance

H8: Empowerment as a leadership attribute in scaling start-ups does not have a significant impact on Ed-tech businesses scaling performance

1.6.2 Proposed Research methodology:

The study employs mixed-methods of research by combining both quantitative and qualitative analysis, to create a more holistic and nuanced understanding of the research topic, providing a more robust and reliable conclusion. Inputs taken from EdTech entrepreneurs & employees, investors, and industry experts.

The data analysis part of the research is carried out using descriptive statistics, reliability analysis, factor analysis and regression analysis. Descriptive statistics has been used to represent the changes that occurred in the collected data. Through calculating the frequencies and graphing them, trends and patterns within the data are clearly highlighted in a precise manner. Reliability analysis has been used as there was Likert scale type data. The Cronbach alpha tests the internal consistency of the data and gives an indication on whether or not the data is reliable to carry out tests and make conclusions. Factor analysis is a dimension reduction method is used to identify the important factors from the factors considered. And finally, regression analysis has been used to identify relationships between variables and test the hypotheses.

The findings of this study will have practical implications for EdTech entrepreneurs, investors, and policymakers, and can inform the development of effective leadership strategies to promote the growth and success of EdTech startups in emerging markets.

1.7 Significance & Contribution of the study:

A rapid increase in growth is seen in Indian Edtech Startup ecosystems. The Pandemic has made its contribution in their growth but the funding provided by investors to these startups

cannot be ignored. The flow of money from the investors indicates the trends of the future and by this measure the Indian edtech startups will take more central space when people discuss growth of startups in India. This study will investigate how leadership styles have an effect on the scaling of startups in the emerging economy of India. There is limited literature available about Edtech startups in India and the information about the leadership style is even more limited. This study will expand on this limited explored area. This study will make theoretical contributions by explaining the process by which the leaders of Indian edtech startups are scaling. This study will examine how leadership style has an impact on the scalability of a company. There are many factors that the management of the organization is required to consider while making decisions about the expansion. Apart from this theoretical contribution, this study will contribute practically for anyone trying to understand the effect of leadership style on expansion decisions. This is valuable information for anyone who is leading a startup or will lead the startup in future. The managers of Indian startups will get an insight on how they should answer the question of expansion. When people look at Indian Edtech startups they see a great growth story that has not only helped students in studying in their time and place but also helped professionals by providing them employment. The contribution of these companies in making education accessible during the duration of pandemic is not ignored. If targeted properly these startups can help in making the Indian Education system more inclusive for people of all social and economic backgrounds.

CHAPTER 2:

LITERATURE REVIEW

2.1 Introduction:

In the contemporary business scene start-ups and fresh companies burst to life with a regularity never witnessed earlier. Start-ups are freshly created organizations that, amongst others, select among potential initiatives (Tyagi, 2022). A start-up is characterized as a young, independent, innovative business that operates under adaptable circumstances. Entrepreneurs typically have a goal or concept and an unyielding will to see it through. This entrepreneur would then oversee the fresh venture. However is management crucial in new businesses? The secret to achievement is possessing a manager that can draw out the maximum ability of the group to maximize the possibility of a successful conclusion. Since there aren't any established organizational frameworks or established processes to rely on when starting a new business, pioneering groups must take the initiative in enterprise formation (Tyagi, 2022). A start-up involves more than just starting up, though. As its goods mature, investors are keen in seeing them go on sale and the youthful corporation ultimately continues to benefit market dominance. To reach this point, the company must scale its operations to meet market demands, achieve sustainability, and change from a start-up to a scale-up (Wasdani, Vijaygopal and Manimala, 2022). A scale-up is different from a start-up in that it has a scalable business prototype and plans to grow globally into new markets. It is also more regimented and organized, has more established procedures, hires more specialized talent, fosters growth through seasoned leadership, and has better service - oriented applications (Singh, 2023). As start-ups get to the stage in which they should seek out new marketplaces or otherwise grow in order to discover a viable operations function, they join the scaling process (University, 2021). When growth provides various new or changing criteria in addition to obstacles for the initiative, the subject of the manner in which leadership changes emerges while scaling. In order to scale, transformational leadership must be used, with a focus on inspiring and motivating group members, fostering a sense of incorporation among team members, and fostering

productive collaboration and conflict resolution within the squad. Preserving the corporate culture throughout scaling would be pivotal (Täuscher and Kietzmann, 2017). The CEO also creates time for applying the above-mentioned principles by supporting empowered independent teams, maintaining the business flat and nimble, while establishing lean processes like HR and finance (University, 2021). Last but not least, external players such as investment capital must be tapped for teaching as well as mentoring as well as providing the required cash. However, there is a chance that one will become dependent on performance indicators that are not ideal for the scale-up (University, 2021).

Understanding the performance-related problem areas of any startup is essential for effective leadership. It involves striving to use creative solutions to address such issues and establishing an effective workplace culture at the business (Korreck, 2019). A manager is defined by their attitude and principles, which they apply to their job each day. Each startup marketing company would remind entrepreneurs how crucial it is to foster a culture wherein the staff feels free to talk about the challenges they are facing (Singh, 2023). These are the issues that are preventing them from working as effectively as possible and delivering the finest outcomes. Recognize their problems, then talk about potential solutions. Secondly, one must be creative within the company. The development of new technologies drives global change. Industry norms continue to change as a result of contemporary company practices (Silk, 2022). Rethinking and developing one's own company procedures is the main key. Using new technologies for optimisation to remain abreast of developments and provide output that raises bar for the sector (University, 2021). This technological integration may be understood by examining the concerns that other companies in a sector, industry rivals, as well as their company experience and using technology to fix those problems. Contrary to common assumption, motivating staff members doesn't include giving corny speeches (Behera, 2021). Also, it has nothing to do with promoting commitment and drive. While this might be one approach, micro-interactions are what really actually motivate employees. There is always a feeling of facade while performing on stage (Singh, 2023). Contrarily, private interactions encourage

people. One-on-one interactions are also a terrific approach to communicate honestly. Set good standards as a manager, particularly if the quarter is going poorly (Kumari and Srivastava, 2022). The manner they present such concerns might have a significant negative impact on employee enthusiasm. It could also give them more motivation (Singh, 2023). One mistake someone may make is attributing bad performance to people's shortcomings rather than identifying systemic causes why this has transpired (Silk, 2022). Adopting an approach that one is not liable for may often inspire workers. A strong leader may motivate their team by setting a positive example for them to emulate and therefore by acting morally. This mindset ought to be the goal as a manager in order for one's company to be successful. The potential cost of investing in one area must be understood very precisely and clearly by a manager (Silk, 2022). The trade-off among increasing marketing investment and increasing sales spending relies on how exposed, profitable, and effective the company is (Khanna, 2023). Evaluating the following steps involves choosing amongst two possible outcomes that might not be in the best financial interest (Fouad, 2022). Yet, effective leadership must work out just how to accomplish this in the most effective manner. Market research, consultations, and perhaps even gut instinct are used to do this, demonstrating how crucial it is for leaders to have confidence in themselves (Khanna, 2023). Considering the advantages and disadvantages of the choices one must make. Finally, considering which choice will help business the most to fulfill the company goal statement (Silk, 2022).

A company's performance is directly influenced by the behavior of its most senior personnel. Individuals possessing decision-making authority have a major role in shaping workplace culture. One's approach as a manager ought to be what motivates the staff every day. It's critical to be transparent about the ideals that demand company assets and to provide an exemplary example. These principles must be reflected in one's own actions. This is particularly accurate when something fails. The manner people handle adversity will create a significant portion of the corporate culture (Tyagi, 2022). Important principles include working hard, prioritizing teamwork, and appreciating each other's shortcomings.

These kinds of values must be promoted from the executive level in order for the group to work better together and produce better outcomes. In the event of defeats, the environment that individuals in situations of authority nurture won't be favorable if they present a noisy and careless demeanor (Khanna, 2023). Human resource management is going to be less inclined to assume responsibility and exert more effort as a consequence (Tyagi, 2022). People have put in considerably more committed time at a company wherein they believe there is more reverence for wealth as opposed to them after a good attitude filter down to additional resources and makes the environment much more likable. A leader needs to be able to seize possibilities when they arise (Amit, Karim and Kafy, 2022). Businesses can grow rapidly through collaboration agreements and PR activities, based on the decision-makers' capacity to seize these opportunities. The best method to develop any organization is through making the correct relationships that let it penetrate other industries and broaden its reach. Such chances provide a fantastic foundation for getting the increase users require. Companies can scale, develop, and expedite as a result (Khanna, 2023). That holds true for appropriate expenditures as well. These expenditures can involve using resources or putting cutting-edge technology into use, both of which have prospective returns. Someone may take full advantage of a selection by adopting it quickly (Gaddi, Kumar and Mishra, 2020). A manager is someone who has the capacity to spot possibilities and seize them. A manager represents a person who possesses a mix of knowledge, insight, intuition, and indeed the courage to take risks (Sethi, Saxena and Singh, 2022).

Struggling to grow a startup into something like a functional, relatively profitable firm constitutes one of the biggest issues it faces (Surana, Singh and Sagar, 2020). Scaling is a more difficult phase for every startup because it can either define its development or cause it to shut down entirely. If one's company is a startup, it's probable that the entrepreneur is searching for strategies to grow. Scaling is crucial because it enables small firms to expand and achieve greater success (Jha, 2020). Yet expanding a firm may be challenging, particularly if one does not really understand how to approach the task. But if the owner sticks to this advice, they would be well on their way to turning the company into a

flourishing enterprise (Havner et al., 2022). The expansion of each and every company is its main objective. The goal is to get to the contribution margin, where all costs are paid for and the company could start to make money. Unfortunately, this calls for extensive planning. Without considering scalability, the company plan would be haphazard at best. Scalability refers to the capacity to grow in size or scope (Gaddi, Kumar and Mishra, 2020). That is conceivable, but it also carries the risk of disastrous failure. It's a matter of placing an emphasis on "capability" instead of focusing on the "transformation" component. Contemplate the necessities that account for the majority of the capability (Havner et al., 2022).

Startup scaling seems to be the activity of growing a company's sales, revenue, or whatever other measurable factor while working with constrained resources, manpower, as well as funds. The process of growing a firm is frequently a massive undertaking that calls for meticulous planning and mitigation of potential dangers (Shirzadi, 2019). To attain the desired outcomes, startups should also select the suitable scaling strategy plans. A strong scaling plan offers step-by-step directions for putting a programme, procedure, new policies, and delivering services into practice (Sharma, 2022).

Scaling is a unique opportunity for any firm. If a business has progressed far enough, people may anticipate significant success. However, it also involves being familiar with company scaling and making sure company scaling strategy is sound from the beginning. The business may have difficulty growing (Havner et al., 2022). If businesses possess the right people, processes, and strategies in place, scaling will go smoothly. But, if a company can find out ways to streamline and organize internal processes, as well as outsource everything that isn't inextricably linked to company key strengths, one may be able to get this approach to operate better and less impatiently (Shirzadi, 2019).

2.2 Overview on Start-up businesses and organizations:

A startup seems to be a business which is currently getting off the ground. One or maybe more company owners develop startups when they want to offer a product or commodities, they believe that there's a demand for. These companies often have high initial costs and low revenue, which is why they look for investment from a variety of sources, such as investment firms. Startups are companies or projects that are focused on a particular good or solution that the founders want to market (Khanna, 2023). These companies frequently lack a fully developed marketing strategy and, most critically, the cash to move on to the next phase of growth. Most of these enterprises' initial investment is provided by the proprietors. Many business owners turn to friends, family, and wealthy investors for extra funding. In part to being highly known for possessing a strong venturing capitalist sector and being a popular destination for businesses, Silicon Valley is also recognized as the sector with the greatest requirements (David, Gopalan and Ramachandran, 2021). Entrepreneurs might utilize seed money to finance their company planning and research expenditures. While a thorough business plan details the industry's stated purpose, objectives, and ambitions, in addition to its leadership and advertising methods, market analysis assists in determining the popularity of an item or service (Khanna, 2023).

When they seek to establish and develop their businesses, entrepreneurs should consider a range of different factors. Some of them are listed below:

- Location: All businesses are vulnerable to regional variables. And it's typically one of the most significant considerations for anybody simply beginning out somewhere in business. Entrepreneurs should decide whether to operate their business in a traditional office setting, online, or from a distant location (Edmonger, 2023). The venue is determined by the goods or services being provided. For instance, a technological start-up selling gear for augmented worlds could require a physical shop to let clients see the intricate aspects of the product firsthand (Burch and Miglani, 2018).

- Legal Framework: Entrepreneurs must consider what kind of legal framework works best for their company. A developer that also acts as the organization's corporate worker should have full ownership (Edmonger, 2023). Partnerships are also fairly simple to organize, making it an appropriate regulatory arrangement for businesses with multiple members who hold shares. Forming a company, a limited liability corporation (LLC) may reduce individual exposure (Khanna, 2023).

- Funding: Startups typically leverage either social contacts or investment firms to raise money. A group of seasoned investors that specialize in assisting startups make up this network. Many people now consider outsourcing to be a workable solution for obtaining the funding they need to build their enterprises (Klingler-Vidra, Tran and Chalmers, 2021). The company owner sets up an online platform for fundraising where followers may make financial contributions. Credit may be used by startups to begin operating their company (Shirzadi, 2019). The business may be able to make use of a facility of credits as capital if it has impeccable credit. The riskiest choice is this one, especially if the startup fails. Some businesses decide on micro enterprise loans to support expansion. A microloan is indeed a brief, low-interest product designed specifically for startups. Financial institutions often offer a variety of specialized solutions accessible for smaller companies. A comprehensive business plan is frequently necessary in order to apply (Edmonger, 2023).

Working at a startup still has many advantages. There seem to be two: additional obligations and educational opportunities. As startups often employ fewer people than large, established companies, employees wear different roles, which raises accountability and creates educational chances (Shirzadi, 2019). Startups, which tend to be more laid back, tend to foster more social workplaces with variable scheduling, increased employee interaction, and flexibility (Edmonger, 2023). Furthermore, startups frequently provide greater workplace perks like child care centers, free meals, and compressed workweeks. Performing with entrepreneurs could be more fulfilling because innovation is fostered and

leadership puts their confidence in great people to give them ideas without restriction (Varghese, Dutta and Pradhan, 2022). Heightened danger constitutes one of a firm's major disadvantages. This mostly has to do with the longevity and revenue of a startup. New businesses need to obtain capital and develop themselves before they start making money. Maintaining investor satisfaction with the company's current progress is crucial (Shirzadi, 2019). Always face the possibility of needing to terminate the business or going short of cash before turning a profit. With startups, extra times are common as everyone is committed to seeing the business succeed (Edmonger, 2023). As a consequence, there could sometimes be difficult conditions and remuneration that is not adequate for the amount of time spent working. Owing to the reality that numerous businesses desire to work on the same idea, competition is sometimes strong (Edmonger, 2023).

Pros of a Startup Business:
- Additional chances to learn
- More accountability
- Flexibility
- Workplace advantages
- The promotion of innovation
- Adaptable hours

Cons of a Startup Business:
- Danger of failing
- Needing to raise money
- High anxiety
- A climate of commercial competition

A few examples of the most successful startups are as follows:

Throughout the 1990s, dotcom startups were typical. Owing to a rush among financiers to make predictions about the formation of these emerging enterprises, venture funding was very simple to come by throughout this time (Shirzadi, 2019). However, the majority of these online firms eventually failed because of serious weaknesses in their marketing

strategies, which included the absence of a method for generating long-term income (Grant, 2021). A small number of businesses did, nevertheless, withstand the collapse of the dotcom boom (Shirzadi, 2019). Just two instances are eBay (EBAY) and Amazon (AMZN) (Grant, 2021). Throughout the first several years, numerous startups collapsed. This first phase is crucial for that reason. Entrepreneurs must get funding, develop a corporate structure and corporate strategies, appoint key employees, iron out complex elements like stock holdings for collaborators and financiers, and make long-term plans. Microsoft (MSFT), Apple (AAPL), as well as Meta (META), previously Facebook, to mention a few, were all startups before becoming some of today's modern most prosperous businesses (Grant, 2021).

Starting a Startup business: The first step in starting a business is to have a great concept. The collecting of facts is the next stage that will aid companies in determining the idea's potential and show how the market is presently reacting to it. Upon performing marketing research, the next stage is to develop a corporate plan that outlines the goals, objectives, core principles, and aspirations of the firm (Grant, 2021). Obtaining funding is among the most important steps. This could come from savings, trades, loans, coworkers, relatives, or family. ensuring that, after receiving financing, the relevant legal and paperwork has been fulfilled (Rice and Yayboke, 2017). This entails setting up a company account and acquiring any necessary licenses or permissions. Creating a corporate location after that and then, developing an advertising strategy to draw clients, build a clientele, and change as the company expands (Silk, 2022).

Partnering with the agencies such as the Small Business Administration, that offers microfinance services to comparatively tiny enterprises, ought to be among the finest as well as first possibilities. The maximum SBA credit value is $50,000, with the median credit amount being $13,000 (Silk, 2022). More learning opportunities, more responsibility, variable work schedules, a laid-back work atmosphere, improved employee

engagement, attractive workplace perks, including innovation are all advantages of operating at a startup.

Due to the fact that startups frequently don't have a long enough history to evaluate their effectiveness, valuing them may be difficult. Also, it takes a while for businesses to start earning any revenue at all (Havner et al., 2022). The traditional financial report measurements should not be used for assessments. Among the best techniques for estimating a company's value include market revisions, projected cash flow, including stage-based evaluation (Silk, 2022). Even though it might be challenging, starting a business may be exceedingly gratifying. Possessing a fantastic concept and attempting to sell it present a number of difficulties, including securing funding, hiring staff, marketing, handling legal matters, and controlling funds. Yet take into account that startups might result in more fulfilling careers as well as the chance to make a lasting impression (Silk, 2022).

Technically, a start-up could be any company that focuses on creating revolutionary products, activities, or platforms which are supported by cutting-edge technologies or confidential knowledge. During the last two decades, the startup scene in India has rapidly grown, and more help is now available across the board (Havner et al., 2022). Startups don't really live in a silo; rather, they are a component of a bigger corporate ecosystem that is committed to developing solutions with a significant social and economic effect. The fact that start-ups represent hubs for cutting-edge inventions means that they provide jobs, which indicates more career prospects; more work results in a healthier society, as well as a better economy seems to have an immediate effect on the development of communities where startups are located (Havner et al., 2022).

In order to help the Indian start-up sector and grow Indian enterprise, the Indian government has put into place a variety of initiatives. For illustration, Prime Minister Narendra Modi introduced the "Standup India" movement in August 2015. The main goal

is to help start-up firms connect with banking firms, inspire creative Indians to pursue their own company ideas, offer infrastructure for developing startups, and promote India as the best destination for online economy. Let's investigate how startups have helped the Indian economy grow:

- **The formation of jobs:** Due to a lack of open government employment, this population shift is pushing the startup climate across the country. As of August 29, 2022, India was the third-largest startup market in the world, with more than 77,000 DPIIT-recognized businesses spread throughout 656 areas (Shirzadi, 2019). Over a comparable time span, these startups produce more jobs than large companies or organizations operating in the similar industry. This will thereby lessen the problem of joblessness in developing nations like India (Весарев, 2022).

- **Fresh Investing:** Several global firms are progressively assigning their obligations to small businesses in an effort to concentrate on their primary competencies. Because of this trend, many international businesses and Indian investment firms are closely monitoring the growth of Indian start-ups in hopes of investing their money (Shirzadi, 2019). For instance, Accenture granted entrepreneurs $1.35 million in revenue during the past year, allowing them the chance to have a substantial effect on both the Local and international markets (VIJAYAKUMAR, 2021).

- **Research and development:** As they frequently work with high-tech as well as knowledge-based activities, startups substantially finance research and development (R&D) in nations like India (Shirzadi, 2019). The R&D staff at the startup actively seeks for breakthroughs and maintains the business informed. Thus, startups promote a practical approach or autonomous investigation at the accredited university. This encourages academics or learners to work with the start-up to bring their theories into practice, which, more crucially, aids in the creation of strategies for economic growth (Shirzadi, 2019).

- **Improved GDP:** Notwithstanding the rising inflationary pressures caused by increasing foodstuffs and oil costs globally, Indian GDP is predicted to rise by 6.9%

in fiscal year (FY) 2022–2023 and 6.2% in FY 2023–2024. As GDP is a key factor inside a country's financial growth, if humans continue to support as well as encourage further start-up endeavors, it's going to be possible to raise national revenues and customer money may also flow across the country (Singh, 2023).

- **Democratizing the Advantages of Technology:** Several entrepreneurs not only promote creativity and technologies, but also show how their advantages extend to the farthest-flung clients. With their innovations, fintech entrepreneurs are now going out to rural regions and providing financial services simply to obtain across tier 2 as well as tier 3 locations. One answer to all regional issues is Hesa, a Fintech and Agritech business that uses technologies and manpower to bridge the rural-urban gap. It effectively manages distribution networks, facilitates financial transactions, and raises the awareness of rural producers' commodities (Singh, 2023). Comparable to something like this, EV technologies are used by e-commerce businesses like Zypp to enable last-mile deliveries affordable and emission-free. These creative businesses have made it simpler for regional business owners operating in remote regions to promote and distribute their goods. Regional entrepreneurship is therefore no longer restricted to a certain area but is now competitive on a worldwide scale, helping India's economy grow.

Local residents continue to buy products and solutions whenever a startup gives them jobs, which increases the amount of money going to the administration and indeed the market overall (Singh, 2023). The marketplace within this region grows when numerous startups are flourishing in one area. As so many people want to live there to earn, this has a significant impact on the city's infrastructure (University, 2021). As connectivity is improved, a large number of lodgings, homestays, dining establishments, and transportation services open up, generating a huge number of jobs and raising the city's income. Furthermore, startups develop cutting-edge products and technology that improve an individual's standard of living. In India, a large number of startups are working in rural regions with the goal of assisting the surrounding residents as a whole, such as the city's economy (University, 2021).

2.3 Ed-Tech industry and start-ups:

The educational sector is responsible for determining how subsequent generations will behave (University, 2021). By 2025, it is anticipated to grow to a $7 trillion worldwide business. The COVID-19 pandemic's unpredictability sparked the growth of the edtech industry, which leverages information technologies platforms for accessible, interesting, as well as individualized teaching. In the preceding five years, India's edtech industry attracted nearly $4 billion in private capital. Within the next decade, it is expected to grow to a $30 billion sector, supplementing and enhancing the traditional classroom teaching methods. India's edtech industry, which is presently valued at $6 billion, encompasses all B2C educational domains, from K–12 to rigorous test arena to further power leveling and retraining even after graduation (Tyagi, 2022). By 2025, the industry will be valued $10.4 billion due to increased demand from tier II and III cities. According to a market estimate, India now has more than 4,450 edtech firms. After COVID-19, things started to get back to usual, which had an impact on corporate strategies, competitiveness, and financing. The research of the "Tracxn Geo Annual Report: India Tech 2022" found that between January and November of 2022, compared to the comparable time previous year, the movement of capital decreased by 39% (Tyagi, 2022). Internationally, the industry was also impacted by macroeconomic forces. The thrilling release of ChatGPT by OpenAI at the year's conclusion, meanwhile, has brought attention back to the advancements that schooling may make with the arrival of Industry 4.0 technologies like artificial intelligence (University, 2021). Technologies may eventually be a necessary component of schools, and new avenues for instruction and studying will open up. In 2023, Indian edtech would need to reconsider its business strategies while putting the demands of its customers and long-term viability first (Tyagi, 2022).

Technology that will spur creativity in the field of education in 2023:

- Hyper-personalized learning: Throughout 2023, this method of instruction will enable teachers to serve pupils more effectively. Each student will be able to build and get a personalized learning opportunity that addresses their own areas of growth

as well as strengths thanks to artificial intelligence (AI) plus machine learning (ML) (Silk, 2022). As opposed to employing a broad teaching strategy and structure, this would enable them to create tailored teaching materials, assessments, and learning materials for specific student populations (Rao, 2021).

- Virtual reality (VR) as well as augmented reality (AR): Between 2022 to 2027, the adoption of VR and AR inside the schooling industry is predicted to increase at a CAGR of 18.2%, according to an analysis by Market Research Future (MRFR). This creates chances for young kids to understand difficult ideas and obtain practical learning opportunities in low-risk digital realities. When it comes to disseminating knowledge in fresh and interesting ways, VR and AR will make significant contributions to the edtech sector. Colleges are already establishing themselves inside the metaverse, which might completely change how people interact with them and study in a digital, immersive setting.

- Micro learning and nano learning: One may create micro-learning (3-5 minute presentations) as well as nano-learning (1-2 minute interpretations) which are tailored to the particular requirements and situations of students by breaking down matters into themes, sub-topics, and finally narrowing it down to the basic essential principles. This type of education is offered to address pressing issues or to promote idea reinforcement (Edmonger, 2023). By utilizing AI and ML, nano-testing may be used to examine extremely specific regions of strengths and weaknesses. It represents mobile learning for the long term.

- Hybrid Learning: By combining in-person and web - based learning, hybrid educational models will increase access to education. Furthermore, it will aid in overcoming the limitations of unstructured or peer-to-peer training, communication, and socializing that pure-play distant formats cannot provide. The hybrid approach of education will guarantee a better verification of the academic results in addition to points and degrees gained because of the versatility it gives in contrast to distant learning (Edmonger, 2023).

Compared to other industries, education continues to lag behind other industries in terms of investment as well as digital adoption. The requirement for modern technology to be integrated into the administration of instruction and the teaching experience is seriously challenged by the fact that only 4% of total education spending is devoted to digitalization. There are projected to be 2 billion additional classroom, campus, institution, and other post-secondary learners worldwide, according to a forecast (Edmonger, 2023). To meet the need for the information economy including a productive workplace, substantial digital transformation is necessary. To choose its future course, the industry must evaluate both the emerging styles and the lessons learned from 2022.

Each generation has benefited greatly from schooling. While living in the contemporary world, most localities still lack proper educational possibilities. Today's youngsters develop enormous expectations for educational technologies. Learners can now learn from almost anywhere in the nation and still receive the very same high-quality education thanks to advancements in the academic sector (Shirzadi, 2019). Owing to EdTech Tools and Software, learners may fully comprehend any subject without ever simply setting foot inside a classroom. Investors are clearly very engaged in the educational technology industry, according to recent trends. The greatest seasons to spend in edtech were 2021 and 2022. Yet a decline was visible by the conclusion of 2022. Nonetheless, according to studies, more than 70% of universities anticipate introducing one or even more digital undergraduate programmes in the following three years. To meet the needs of the edtech sector, companies must thus think creatively (Shirzadi, 2019). A corporate sponsor will provide funding for one's edtech venture if they believe their concept has promise. If a company can get investor money, there's a chance they will also get advice from seasoned businesses, connections to other capitalists, as well as other advantages. These days, starting an edtech company is cheaper. The original cost in an edtech firm is relatively minimal because of the development of technologies plus the increased accessibility of free software and highly viable offshore collaborators (Shirzadi, 2019). Unlike a decade ago, producing software and building websites for businesses is simple. Nowadays, it is feasible

to build an e-learning portal at a reduction of 20–50%. Also, entrepreneurs may simply update, republish, and disseminate eBooks to a broad audience via social networking sites without having to make significant extra investments. The K–12 teaching industry is anticipated to grow by up to 25% by 2026 (Grant, 2021). Advanced educational organizations are starting to see the potential of digital learning in the wake of the epidemic. It facilitates cost savings and expands enrolment to a larger pool of prospective students throughout the globe. Both the quantity of high-tech devices and indeed the skilled individuals who can utilize them efficiently are growing.

As a growing number of schools accept and employ digital resources, there is a rise in parental involvement in their child's schooling. This suggests that there are more possibilities for schooling in the home. An EBEF analysis estimates that the Indian EdTech market was worth US$ 750 million in 2020 and is projected to grow by US$ 4 billion by 2025 at a CAGR of 397.7 percent (Grant, 2021). It is reasonable to conclude that India's edtech industry has grown significantly over the past few seasons and will likely continue to develop in the years ahead. Its rise has been influenced by a number of variables, but one of the main propelling forces has been the nation's extensive access to reasonably priced broadband and cellular gadgets (Grant, 2021). Its availability is anticipated to last into the future, fueling the edtech sector's continuous expansion. The IAMAI-Kantar ICUBE experimental evaluation indicates that India would have 622 million registered broadband consumers by 2023-2024 (Khanna, 2023). Due to increasing adoption in remote and minor municipalities across the nation, this figure is anticipated to expand by 45% to 900 million by 2025. It will be simpler for edtech enterprises to access a wider client base and grow their businesses as a result of the increasing usage of smartphones and the web in remote rural areas. Moreover, it will stimulate the creation of brand-new, ground-breaking edtech products created specially to address the requirements of rural areas. The administration's increased attention towards the edtech sector has improved the business climate for edtech firms. This would promote the industry's expansion and advancement. In addition to financing in edtech businesses and releasing regulations to support the

utilization of e-learning portals and digitized academic resources, this is actively promoting technical education. Among these, the National Education Policy (NEP) 2020 is by far the most important. The focus on educational technology under the National Education Policy (NEP) 2020 is anticipated to increase desire for edtech goods and solutions. It offers chances for new businesses to join the marketplace and for established businesses to grow in order to create cutting-edge technologies that answer the changing demands of the academic sector (Grant, 2021). Including its laws allowing 100% foreign direct investment (FDI) in the school system underneath the automated channel of authorization, the administration also offers enormous opportunities for international investors (Khanna, 2023). This strategy facilitates global cooperation and the sharing of thoughts by streamlining and simplifying the procedure, which may further boost the development and efficiency of educational technologies in the nation (Khanna, 2023).

2.4 Influence of Leadership:

From fostering cooperation to deciding which tasks should be completed first, leadership appears to possess a significant influence in an organization. So, then what precisely qualifies as "excellent leadership"? This is an incredibly opinionated and challenging topic to address. There are many different types of administration in the corporate sector. There are multiple professional paths where leadership is a key component of the position specification. CEOs are indeed an institution's top planners at the upper ranks and are figuratively the firm's head. Yet even in lower-level jobs within a company, having strong leadership abilities may be quite helpful.

The Institute for Innovative Management, a nonprofit committed to governance improvement which has worked with several Fortune 1000 companies, has listed numerous vital qualities of a director (Silk, 2022). Compassion, bravery, the capacity to distribute, plus learning agility—the capacity to pick up information fast and use it in pressing circumstances—are some of these traits. Leadership professionals place a high value on interaction abilities. An assertive person could use their interaction abilities to openly

discuss fresh concepts that can add significance for the corporation and upend the established order in a positive way (University, 2021). They could also pertain to the "fortitude" part of management and employ it to effectively assign responsibilities to representatives of their group and obviously transmit messages to each other, in addition to those at an executive stage (University, 2021). Although the workplace and indeed the battleground are somewhat different settings, corporate executives and military commanders have many of the same qualities that define effective leadership (Silk, 2022). Some of the most noticeable characteristics of executives is their capacity for taking effective action. According to military study, a commanding officer's likelihood of starting a fight in conflict is equivalent to 70%, compared to a private's 20% probability (University, 2021). At work, it's frequently remarkably comparable. Taking the lead might be challenging. Innovative thinking might be going to be challenging if one wouldn't understand precisely what is required or simply can't see "the larger perspective."

Organizational instructors, for instance, assist in educating various operating experts in order to equip them with the innovative kinds of abilities that a business need. This necessitates an in-depth comprehension of the industry's changing needs with regard to goods and services. Or, to put it another way, a "large picture" comprehension (Tyagi, 2022). HR professionals must comprehend individual capabilities and how they relate to the remainder of the firm as they participate in the planning process. And similar to numerous other corporate management job paths, that depends on a person's capacity for leadership. If a person or a group is managing a business, individuals may need to decide how to assign tasks, resolve interpersonal disputes, handle unforeseen issues, and create their organization's values. To solve those types of issues, business management competence is a must (Tyagi, 2022). It's difficult to stress how crucial leadership is in company management. At the top standards, a leader's influence—whether positive or negative—can reverberate across an entire company. It may inspire team members and give them a goal and emphasis. A firm's evolutionary orientation and business culture may both be established with the aid of effective leadership (Tyagi, 2022). In addition to

numerous historical instances, humans have contemporary examples of outstanding corporate executives like Bill Gates, Elon Musk, Steve Jobs, and Warren Buffett.

Jack Welch managed GE's ascent from a valuation of $12 billion to $505 billion all across the period of his tenure by making many purchases and expanding the business. His effort in modifying corporate procedures to force staff to embrace change, hiring executives he thought could keep staffs engaged, and requiring that they work very closely alongside staff to fully understand their responsibilities. These decisions have the ability to identify, redefine, and begin at the very bottom.

Yet, management abilities are essential even within positions that don't initially look to really be executive positions then at other managerial levels (Singh, 2023). Inside the office, a competent leader may promote and develop collaboration, nurture a feeling of the greater good, inspire and instill trust, or provide objectives and a direction. Steve Jobs once said, "Leadership seems to be about empowering individuals to achieve goals they never assumed they might do, while management is all about attempting to persuade individuals to achieve goals they don't desire to do."

Four of the most crucial characteristics of a corporate leadership are as follows:

- **Leading by example** – Setting an excellent example. Doing what a leader believes constitutes one of the finest ways to motivate others. If a leader demands 110% from other people and leaves early, then run the risk of lowering morale. Individuals would like to have their decision makers to be answerable.
- **Good Communication Abilities** - As was already established, showing good written and verbal communication abilities is very beneficial for governance (Singh, 2023). To improve interaction and establish bonds with the folks a leader is directing, it might be beneficial to have the ability to intellectually empathize, or put themselves in another person's shoes.
- **Emotional Intelligence:** Daniel Goleman, a psychologist and author of the best-selling book Emotional Intelligence, presents an excellent argument that effective

leaders possess a quality he calls "emotional intelligence." Included in this are traits like self-awareness, compassion, ambition, interpersonal skills, as well as self-control (Singh, 2023).

- **Vision** – Leadership requires the capacity to perceive "the broad picture." To do that, one may need to acquire a broad range of technical and interpersonal talents. It can include having the vision to see shifting market trends and possibilities for novel product categories.

Comparable to how there are several leadership approaches in commerce, it's frequently critical to select one of them based on the circumstances.

- Democratic politicians utilize informal surveys to help them make choices, but ultimately it is up to them to reach a solid judgment. Democratic leaders can more easily take advantage of senior staff members' expertise when such staff members are subject-matter experts. Even though encouraging participation, this management style may sometimes obstruct decision-making (Silk, 2022).

- Autocratic management is characterized by the ability to make choices independently and without consultation with others. Making choices swiftly and excluding unqualified people may both benefit from this (Silk, 2022). People might feel excluded from important decisions, and businesses are at risk of forfeiting the insight of crowdfunding.

- The opposite of servant administration is fundamentally an authoritarian, top-down management approach. The aim of any servant leader is to fulfil the needs of their team and ensure that everyone enjoys working there. There seem to be scientifically established links between worker satisfaction and performance, but this strategy may be challenging when management needs to make controversial decisions and can take longer to solve issues than authoritarian leadership (Silk, 2022).

- Whenever it relates to standards, delegation of authority essentially consists of creating rules and processes that everyone must abide by. Although this kind of management is effective for occupations that are routinely focused, it is not suitable for inventive or creative issue solving methods (Silk, 2022).

2.5 Leadership effectiveness and Scaling of start-ups:

Anybody choosing among several management ideas can find it helpful to weigh their individual advantages as well as weaknesses (Shirzadi, 2019). Consider the possibility that appeal is more crucial for servant management than for authoritarian management. Finding the management method that's most effective for oneself can be a skill that can be mastered through training and experience. There are numerous distinct leadership styles (Shirzadi, 2019). Leadership is about inspiring and motivating others to do tasks that are crucial for the group, business, or team. It may also refer to "the technique through which one person persuades a group of people to pursue a common objective." In contrast to management, which focuses on bureaucracy, prepping, influencing, and so forth., leadership emphasizes social communication with individuals. In addition, leaders—as opposed to managers— are seen as partners with their subordinates instead of just people to be managed. As a result, their job is to encourage and incentivize their subordinates to work towards the organizational goal (Shirzadi, 2019). Power follows leadership since it is among the most valuable tools for influence. Being in a situation to impose legislative-, incentive-, coercive-, or informational power is one way to exert authority (Khanna, 2023). That becoming a specialist or referential force allows one to use it as a personal ambition as well (Shirzadi, 2019). From a variety of perspectives, management has been defined, evaluated, and examined, and there is ongoing debate about whether it is a collection of personal characteristics and abilities or a method involving the manager, their adherents, and the environment they work in. The disparity between those points of view ultimately suggests that management is either something one possesses or something that may be acquired (Khanna, 2023).

Anyone at all stages of an organization can be managers, thus it's incorrect to think that leadership is solely a function of the top positions. The directive and supporting behavioral patterns are the two main behavioral patterns used by leaders (Khanna, 2023). Simply said, supporting conduct helps the members to feel better about the circumstance whereas directive behavior of a leader establishes objectives, borders, tools, and procedures. These

two approaches result in the dichotomy between the motivating transformative manager and the goal-oriented transactional manager, the two primary leadership philosophies mentioned when examining conventional leadership (Khanna, 2023). Focusing on and enhancing quality work while fostering a sense of teamwork and management fulfillment are hallmarks of transformational leadership. This is achieved through enhancing the interaction with adherents and creating a shared drive and ambition to accomplish a common goal (Grant, 2021). The leader must possess particular abilities, such as "idealized influence," in order to do this. Idealized influence, inspiring motivation, and personalized consideration. Instead of emphasizing the purpose, transactional leadership places more emphasis on objectives and their accompanying incentives, which helps employees feel connected to the current work. Leadership via two forces is characteristic of transactional leaders. They could primarily employ a "contingent incentive," which is compensation in exchange for success. Furthermore, they take the approach of "administration by exception," which involves highlighting failures and deviations from the intended outcomes (Grant, 2021).

In order to collect and activate a "supporting cast" of individuals who get dedicated by the goal to the finding and development of purposeful value creation, corporate entrepreneurship uses visionary situations. This leadership is exercised in a business environment, for example, a company charged with seeing, assessing, and seizing entrepreneurial chances (Havner et al., 2022). The literature frequently asserts that this environment may be found not just in new businesses, start-ups, or SMEs but also in any company that must act entrepreneurially for a particular cause. Entrepreneurial leaders frequently launch new companies and pursue cutting-edge endeavors. Entrepreneurial leadership and transformational leadership are comparable because they both compel adherents to work for a common greater goal. The distinction is that entrepreneurial managers are able to go one step farther in order to safeguard the company's existence and motivating supporters to take chances. The very next personal characteristics are indicative of an entrepreneurial manager (Havner et al., 2022): huge motivation for accomplishment,

willingness to take sensible precautions, enthusiasm, creativity, proactivity, agility, vision, tenacity, customer orientation, non-hierarchical, and preference for dealing with outside consumers in addition to long term planning. The issue that emerges is whether this represents a broader list of obstacles which the entrepreneurial leadership encounters than certain attributes. This is obviously a lengthy list. Some academics and industry experts working in the same field divide these into two different obstacles for the entrepreneurial leader: first, developing and selling a narrative concerning a potential future circumstance; and second, selling that narrative to supporters and interested parties in a manner that evokes a strong sense of commitment (Havner et al., 2022).

2.6 Research Gap:

Startups that wish to succeed in the commercial world should seek ways to develop their managerial abilities and creative business approaches. Unique start-ups are good for the economy's expansion. Clearly, entrepreneurship, leadership, and the financial system is expanding mostly due to innovation. Establishing a business does not automatically make someone a manager (Gaddi, Kumar and Mishra, 2020). Not only do leaders exist when there are more workers or supporters, but they also become leaders when the economy changes. the effect of an entrepreneur's personal traits, ability to spot opportunities, and managerial abilities on the success of their firm. The study's findings showed that, as a mediator between an entrepreneur's talents and traits, opportunity detection skills had an impact on company performance. The impact of a cooperative, experienced, and competent entrepreneurial venture as well as start-ups' assets on the success of their organization is investigated. According to the literature review, financing has a massive effect upon a start-up company's sustainability, though it can have a negative effect when a business is just getting off the ground. The tiny start-up businesses provide better returns than huge corporations. The effectiveness of start-ups is affected by creative strategy and transformative leadership. The study's insights identified the variables affecting the success of new businesses (Gaddi, Kumar and Mishra, 2020). Hence, it is also demonstrated that a start-commercial up's success depends on its management abilities, creative business

approaches, and operational efficiency. Entrepreneurial leaders aggressively motivate and teach individuals to reach their maximum potential rather than only offering them the chance to better themselves. These initiatives appear to be efficiently guiding individuals towards self-actualization, while being backed by the mindset and environment that successful entrepreneurs create. On a broad scale, the extensive literature on management concentrates on a leader's capacity to persuade a set of adherents and emphasizes the interaction between three crucial elements: the manager, the adherents, as well as the context. Startups function in a particular environment that is defined by a shortage of resources—financial, intellectual, and organizational. The management will create the fundamental vision and gather the assets required to realize that goal. A framework for understanding when, why, and also how founder-CEO leadership behavior affects start-up performance has been presented. According to the findings, transformative leadership significantly improves start-ups' success. According to the research, a transformative manager, though, not only develops and communicates a vision, but also has a strong faith that the goal can be realized via teamwork (edmonger, 2023). As start-ups grow, more people are employed, implying that the founder/role CEO's as leader becomes increasingly important. Yet, there isn't much scientific research that has looked at management in the setting of start-ups. Corporate development occurs in 5 levels: the start-up, development, stability, specialization, and collapse phases. The businesses are tiny and heavily focused around the original entrepreneur inside the early stages of start-up. These businesses are susceptible due to unpredictable productivity growth (Slesarev, 2022). There are minimal rules and little formalization in these new businesses. Finding specialized business fields, securing funding for the company, creating prototypes, and creating task frameworks are the essential business duties at this phase. With regards to expansion pace and consistent revenue, the company is still in the "start-up" stage and has not yet stabilized. Existence and keeping the few clients/customers present are struggles. The company is attempting to establish itself. Mechanisms and procedures are still gaining formation throughout the initial stages and have become more flexible. Mechanisms, techniques, and approaches are few and continually developing. The proprietor (entrepreneur) is primarily responsible for

obtaining money, and there is a significant reliance on relatives, acquaintances, including close family (Edmonger, 2023).

Startups who want to thrive in business must look for strategies to improve their leadership skills and innovative company ideas. Innovative startups are advantageous for the growth of the economy. Obviously, innovation is largely responsible for the expansion of entrepreneurship, management, and the monetary system. A person does not become a manager just by starting a firm. In addition to existing when there are additional employees or supporters, leaders also emerge whenever the market fluctuates. the impact of a business owner's character attributes, capacity for opportunity recognition, and management skills on the company's performance. The results of the study demonstrated that opportunity identification abilities affected business success as a mediating role between a startup's abilities and characteristics. The literature seems to be how start-ups' resources and coordinated, seasoned, and skilled entrepreneurial ventures affect the achievement of their company. The literature analysis indicates that finance, even while it might be detrimental when a firm is just getting started, has a significant effect on the long-term viability of a start-up firm. The returns from small startups are higher than those from large organizations. Innovation strategy and transformational leadership have an impact on start-effectiveness. The study's conclusions revealed the factors influencing the success of start-up companies. As a result, it is also shown that a start-success depends on its managerial skills, original business ideas, and organizational effectiveness. Successful entrepreneurs actively encourage and instruct people to realize their full potential as opposed to simply giving them the possibility to improve themselves. These programmes seem to be effectively assisting people in achieving self-actualization, and they are supported by the mentality and atmosphere that effective entrepreneurs foster. The vast amount of organizational literature, on the whole, focuses on a leader's ability to persuade a group of followers and highlights the interplay between three key factors: the manager, the followers, and the situation. Startups operate in a specific context that is characterized by a lack of resources on all fronts: monetary, intellectual, and organizational. The

administration will develop the core vision and amass the resources necessary to achieve that objective. A paradigm has already been offered for comprehending what, where, and additionally why founder-CEO management conduct impacts start-up performance. The results show that transformational leadership greatly increases the profitability of start-ups. Yet, the study finds that a transformational leader not only creates and conveys a vision but additionally possesses a deep belief that the objective can be achieved via cooperation. More employees are recruited as start-ups expand, suggesting that the founder's or CEO's job as manager would become more crucial. Yet, little scientific study has examined management in the context of start-ups. = At the early phases of entrepreneurship, the companies are small and primarily centered all around the company's creator. These companies are vulnerable because of erratic increased productivity. In these new firms, there are few regulations and formalities. The crucial business tasks at this stage include locating specialist business sectors, obtaining money for the organization, developing prototypes, and developing task frameworks. The business is still in its "start-up" phase and hasn't yet been stabilized in terms of growth rate and steady revenue. Existing and maintaining the few customers/clients' existent are challenges. The business is making an effort to develop itself. In its early phases, techniques and practices are still forming but are now more adaptable. There aren't many systems, methods, or strategies, yet they are all evolving. The owner (businessman) is generally in charge of raising capital, and the company has a substantial dependence upon relatives, friends, and even close family members.

2.7 Conceptual framework:
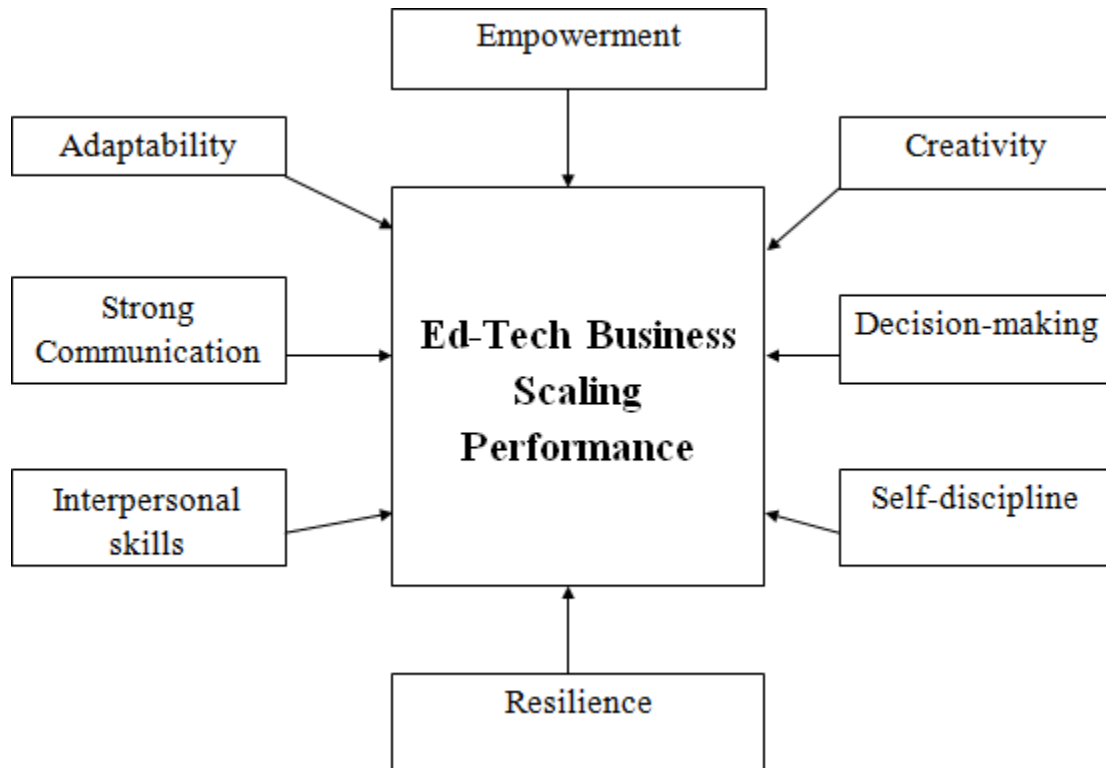
Figure 1: Conceptual Framework of the Hypothesis

2.8 Hypotheses Development:

It might be challenging to become an adaptable competitor, particularly for new businesses. These businesses typically focus on controlling scale and productivity, and as a result, their hierarchical frameworks and set operating procedures lack the variety and adaptability necessary for quick adaptation and growth.

$H1_0$: Adaptability as a leadership attribute in scaling start-ups does not have a significant impact on Ed-tech businesses scaling performance

Even in startup businesses, a number of strategies have demonstrated their ability to generate adaptive advantages. These may appear to the administrators concerned as merely

a continuation of regular operations, but in reality, they foster an environment in which adaptability may flourish.

H1$_1$: Adaptability as a leadership attribute in scaling start-ups does have a significant impact on Ed-tech businesses scaling performance

Unnecessary or aggressive speech at work generates a hostile atmosphere, reduces productivity, increases stress, and generates problems amongst coworkers. Moreover, it lowers work satisfaction levels and raises turnover rates.

H2$_0$: Strong communication as a leadership attribute in scaling start-ups does not have a significant impact on Ed-tech businesses scaling performance

A collaboration is bound together by trust, as well as a good leader makes sure that the colleagues engage in various activities to foster trust. In order to prevent misunderstanding in the group and foster trust, managers beforehand explicitly communicate the jobs and responsibilities of all teammates in a task.

H2$_1$: Strong communication as a leadership attribute in scaling start-ups does have a significant impact on Ed-tech businesses scaling performance

There are times when the interpersonal skills of a leader are just not enough for the organization or its structure to flourish. There are several other aspects to focus on. The interpersonal skills do not always have a relevance with regard to the productivity or revenue of a startup or its scaling.

H3$_0$: Interpersonal skills as a leadership attribute in scaling start-ups do not have a significant impact on Ed-tech businesses scaling performance

Effective leadership requires the capacity to work well with others. These abilities enable leaders to inspire their teams more effectively, promote higher engagement, and build collaboration—all of which eventually help a business succeed.

H3$_1$: Interpersonal skills as a leadership attribute in scaling start-ups do have a significant impact on Ed-tech businesses scaling performance

At times, creativity is not the only thing that the leaders of an organization should shed lights on. There seem to be other technical aspects that need to be prioritized as well otherwise, the business will not see the light of success.

H4$_0$: Creativity as a leadership attribute in scaling start-ups does not have a significant impact on Ed-tech businesses scaling performance

Creativity of a leader does have a relevance with regard to the business as well as its calling performance since it provides new ideas and concepts to make the company flourish.

H4$_1$: Creativity as a leadership attribute in scaling start-ups does have a significant impact on Ed-tech businesses scaling performance

Getting use of the facts at hand, winning over partners' confidence, and acting decisively are all important components of the skill of decision-making. It's not always about finding the illusive "optimal" decision.

H5$_0$: Decision Making as a leadership attribute in scaling start-ups does not have a significant impact on Ed-tech businesses scaling performance

The decision making and guidance of the leaders help their followers and teammates to follow a particular direction and maintain unity with the help of the plan created by their leader. This unity and cooperation help the company reach heights.

H5$_1$: Decision Making as a leadership attribute in scaling start-ups does have a significant impact on Ed-tech businesses scaling performance

Self-discipline is an important aspect of a leadership skill in order to manage a firm and make it grow; however, it is not the only thing that leaders should focus on since it does not have much relevance with regard to scaling.

H6$_0$: Self-Discipline as a leadership attribute in scaling start-ups does not have a significant impact on Ed-tech businesses scaling performance

It's crucial for a manager to strike a balance between developing a high-performing and conscientious team and helping them advance professionally.

H6$_1$: Self-Discipline as a leadership attribute in scaling start-ups does have a significant impact on Ed-tech businesses scaling performance

Resilience is not as important as a leadership attribute due to its set of drawbacks such as unpleasant feelings, such as worry and sadness.

H7$_0$: Resilience as a leadership attribute in scaling start-ups does not have a significant impact on Ed-tech businesses scaling performance

Long-term success of a business depends on including resilience from the outset. Being resilient involves being capable of adapting to changes, getting through challenges, and keep going forward even though matters don't go as planned.

H7$_1$: Resilience as a leadership attribute in scaling start-ups does have a significant impact on Ed-tech businesses scaling performance

Unavoidably, empowerment results in a leaner, more efficient management structure. Therefore, there is a chance that lines between professional connections and lines separating different levels of power may blur. This could call for more management of the workforce, not less.

H8$_0$: Empowerment as a leadership attribute in scaling start-ups does not have a significant impact on Ed-tech businesses scaling performance

Empowerment has a significance when it relates to scaling performance since it aids firms in understanding how to run, what choices to make, how to carry out activities, etc.

H8$_1$: Empowerment as a leadership attribute in scaling start-ups does have a significant impact on Ed-tech businesses scaling performance

2.9 Chapter Summary:

With the growing use of technology in remote and minor municipalities around the nation, the development of edtech within India is brilliant and hopeful. By developing rules that promote the incorporation of technologies in learning, the administration has also been assisting the development of edtech in India. Prospective ed-tech encounters will continue to be incredibly important for integrating hybrid learning approaches and virtual communities. These methods present chances for students to acquire priceless knowledge and abilities that may help their development both personally and professionally. In general, as the education industry develops, it is probable that people will witness the creation of cutting-edge technology, systems, and learning techniques targeted at increasing education's performance and efficacy.

As Indian start-ups continue to need a necessary item or service, the amount imported from abroad is decreased. This reduces working capital to certain other countries while also boosting capital movement inside the Indian marketplace, which is essential for the expansion of the Indian industry or the Indian economic sector. The startup-friendly laws in India don't always require large capital outlays or financial inducements. Yet, businesses do need assistance during all stages of development, including professional strategy, community involvement, and building relationships with skilled corporate consultants. Entrepreneurs who have found prosperity and astute financiers provide this help. As India possesses a huge, diverse society with several brilliant individuals hunting for opportunities, it is essential to boost the state's economy by creating a startup approach, startup websites, and helpline in every single location. Establishing incubator sites, co-working spaces, company units, and encouraging an entrepreneurial mindset in every learner from a young age becomes even more crucial.

The foundations of future global transformation are found in startups. This was the beginning of Google. That's how Apple got its start. This was the beginning of Microsoft. Yet the chances of success are slim. Management is certainly a critical component in any endeavor. In situations such as COVID-19, it is the management which will create the fundamental vision and gather the resources required to realize that goal. Initially, entrepreneurial managers maintain strong self-motivation by hiring individuals that share their goals and principles. Furthermore, entrepreneurial managers work on their ambitions and objectives, give them responsibility and independence, and mentor them so they may develop their skills in order to connect to higher wants like self-esteem as well as self-actualization. Finally, while speaking with workers, entrepreneurs communicate and utilize rhetoric skillfully. Ultimately, they bring everything together by fostering a strong culture and attitude that follows three sayings: 1) Everything is conceivable; don't put limits on your thoughts. 2) Don't be scared to attempt; learning sometimes involves making errors. 3. Never give up; it all depends on your attitude. Instead of functioning as separate weapons, those tools/techniques work as a framework that reinforces one another.

CHAPTER 3:
RESEARCH METHODOLOGY

3.0 Introduction:

In a project, research, academic published article, or several other formal pieces of research, there is typically information about how the researcher conducted the inquiry as well as the methods and approaches they used (Rao, 2021). Understanding the research methodology and the range of approaches and resources available might help when planning an exploratory study. An analyst may use a study design to describe how they plan to conduct their investigation (Слесарев, 2022). It is a purposeful, logical approach to a research topic. A methodology describes the procedures a researcher would follow to conduct the inquiry and provide accurate, trustworthy results that meet their objectives. It covers the information they will get, where they will get it from, and how they will gather and analyze it. An approach grounded on research gives the investigation credibility and yields reliable scientific results. Additionally, it offers a thorough structure that aids in maintaining students' focus and enables a simple, efficient, and manageable approach. The audience may understand the strategy and procedures used to arrive at the results by understanding the subject's methodology. A student should take a variety of considerations into consideration while developing their study plan. One of the most crucial decisions is whether to employ qualitative, quantitative or even a combination of the two data approaches. Because the evidence is always in the form of graphs or statements, investigations might concentrate on gathering either phrases, data, or both (Rice and Yayboke, 2017).

These reasons underline the need of using a reliable research methodology:
- There is enough data available for more researchers to do a similar study.
- When a scholar is criticized, they might use this method to defend their viewpoint.
- It might be beneficial by giving students a clear strategy to adhere to throughout their assignments.

- Scholars can choose the best approaches for their goals with the aid of the technical design process (Slesarev, 2022).
- It enables academics to immediately express their experiment's goals in precise language.

The many components of a research methodology, such as the research paradigm, research strategy, study design, reasoning approach, and data collecting technique, will be covered in this part. The section will clarify each of the characteristics by discussing or explaining the selected approach and providing justification for that decision.

3.1 Research Design

It is common practice to decide on the methods and methodology for the study's research at the beginning. A work design seems to be a document outlining a project's methodology, technique, and some other key information. According to experts, the research design serves as the panel's unifying principle. This (the inquiry design) contributes to the topic's organization and attention, resulting in good outcomes (Grant, 2021).

Here are some recommendations for an effective research design:

- identifies the problems
- investigates the literature related to the subject
- outlines the sources of the data, identifies the theory, and specify how the information will be handled.

The research design's characteristics are:

Validity: A variety of techniques may be employed to evaluate study findings. Choosing the right measuring tools to evaluate results in line with the study goal is aided by a strong research design.

Generalised: Effective research designs provide information that is not constrained by the number of respondents or the composition of the examining subgroup.

Neutrality: Prior assumptions are a necessary part of any research effort and will be thoroughly explored during the course of the investigation. A sound research design ensures that the hypotheses are unprejudiced and unbiased. Additionally, it asserts that the hypotheses developed at the outset served as a foundation for the knowledge discovered during the inquiry.

Important elements of a research plan:

Reliability: Every time research is conducted if done correctly, the design might produce accurate results. However, only if the study approach is reputable can similar findings be obtained.

The following are a few elements of a successful research design:
- Mission statement
- Data collection methods
- Strategies for data analysis and types of study
- Having issues meeting the research's investigational requirements
- The length of the experimental investigation and the measurement of the test

Reasons for the necessity of the research design
- decreases precision
- increases resilience and effectiveness
- eliminates bias and errors
- Orients studies in the appropriate direction and helps test the topic while reducing time spent.

Key principles for study design:

Variable: The concept of a factor can take on a wide range of numerical values. For instance, height, size, etc.

Dependent variable: In any study, a variable that is being looked at is referred to as a dependent variable. This is somewhat dependent on the variation of an independent variable.

Independent variable: Those factors in a study that stand alone are considered independent variables. For instance, if a team's performance on a test is the result of their efforts, then their efforts would be the underlying component and the aggregate grade would be the regression coefficient (Klingler-Vidra et al., 2021).

Hypothesis: The term "hypothesis" refers to an assertion that has to be verified via participation in specific research.

The Different Types of Research Design:

A scholar has to be knowledgeable about numerous research methodologies. Additionally, choosing the best research technique is facilitated by having a good awareness of the various methodological methods.

The two main types of research designs are quantitative and qualitative. We'll go through each in more depth below.

Making a Plan for quantitative research

Over the course of the investigation, the quantitative inquiry design seeks to provide answers to the who, what, where, how, and when questions (Edmonger, 2023). Additionally, the results of the quantitative examination are simply displayed using statistics, graphs, spreadsheets, and ratios.

Making a qualitative research design

A qualitative investigative method seeks to understand both how and why. It makes use of open-ended inquiries and facilitates the participants' efficient exchange of ideas. Businesses should use qualitative research to comprehend customer behaviors and desires. Five groups may be used to further categorize the various research design models:

Experimental design: In order to address a topic scientifically, the experimental design, This type of research technique develops a separate cause and consequence for each event. Additionally, it tries to understand how the independent component affects the reliable factor. It is commonly used by social sciences to track people's behavior and better understand human social dynamics (Edmonger, 2023).

Correlational design: Through the use of correlation research design, a connection between two pertinent variables is formed. The investigator keeps track of these variables throughout time and draws conclusions from them. For this form of study design, two different groups are required.

The coefficient of correlation establishes the relationship between two variables. The range of this correlation coefficient's value is from -1 to +1. A correlation value of 1 indicates a positive association between the two variables, whereas a correlation coefficient of -1 indicates a negative relationship (Sharma, 2022).

Descriptive design: Using a theory-based investigative method called descriptive design, the study's main subject is described. In order to arrive at results, this form of research strategy uses checklists, chance observations, case studies, and other questioning methods.
Diagnostic design: The goal of diagnostic investigations is to pinpoint the underlying causes of problems and provide remedies. This kind of research approach divides the problem into three steps: development, appraisal, and therapy (Shirzadi, 2019).
Explanatory design: In this type of research design, the researcher looks at theories and assumptions related to a certain subject. The article's primary goals are to investigate the subjects' lesser-known elements and provide answers to the questions of whether, when, and why.

The research adopted the ***Descriptive research design*** because ***Descriptive*** research helps academics better understand a certain topic and improves their capacity to fully appreciate

78

a particular circumstance. In descriptive research, the distribution of one or more variables is described without consideration of any causal or other hypotheses. There are several forms of descriptive studies, including case reports, case series, cross-sectional studies, and ecological studies. The final of these utilize aggregated data for groups, as opposed to the previous three which collect data on individuals. The descriptive design is the most straightforward of the several observational study approaches. The researcher is able to examine and characterize the distribution of one or more variables without taking into account any potential causal or other assumptions (Havner & Vang, 2022). No matter the category, descriptive investigations are frequently fairly simple to carry out. The information is already accessible for reports on incidents, case sequences, and studies on ecology. These may be easily gathered for cross-sectional investigations (often in a single encounter). As a result, these research designs are frequently simple, fast, and require little work. Furthermore, these studies are frequently not subject to rigorous ethical review, unless the data being sought is of a confidential nature (e.g., social practices, consumption of drugs, etc.). The impact of illness on a group of people can be estimated using descriptive research, such as frequency or recurrence. Planning for resources can benefit from this knowledge. For instance, knowledge about the incidence of cataracts in a community may assist in determining the right number of ophthalmologic institutions for the town. Information from descriptive studies conducted in several populations or on various dates in the exact same demographic may be used to pinpoint chronological and geographical variations in the prevalence of illness (Havner & Vang, 2022). This might lead to the creation of disease-cause theories that can later be confirmed by means of a different, more intricate design. To gather information from the individuals in the gathering and further their study, researchers scheduled sessions. A technique employed within this research design is an in-depth survey, whereby the investigator speaks with authority on the subject at hand. Often, they are individuals who have firsthand knowledge of the topic. These are the main reasons or aspects which the Descriptive research design was chosen for this research in the first place.

3.2 Research Approach

For gathering and analyzing data, the two major relevant research approaches seem to be quantitative and qualitative. The type of data the analyst needs will determine the research technique (Gaddi et al., 2020). Information might be categorized as either quantitative or qualitative. Quantifiable data must be evaluated using conventional statistical methods since this data can be quantified. Calculating the average, percentile, sample variance, covariance, and many other quantitative evaluation criteria may be done using software like SPSS or R. Literature review is necessary for the understanding of primary analysis, which can be textual or visual. Statements and keywords are categorized and divided into subcategories during topic evaluation. Linkages between emerging topics may be seen while the material was being transcribed. Using programs like Atlas.ti or NVivo makes creating a conceptual framework simple. During descriptive research, analysts may use both quantitative and qualitative data. Using descriptive research, observational data in a naturalistic setting are reported. Only statistical approaches are capable of supporting the experimental study. Experimental study modifies variables to examine a hypothesis in the hopes of coming to a conclusion (Gaddi et al., 2020). Understanding the type of research a researcher will do is essential. When conducting primary research, the researcher will actively take part in the information collection procedure. When performing secondary research, a researcher solely consults published sources. Primary and secondary research each have benefits and drawbacks. Despite the fact that primary research may be quite costly and time-consuming, it offers the researcher authority over the data. Although secondary research is common, the researcher still has to make sure the information is accurate.

3.2.1 Quantitative Research Approaches:

Scientific research frequently employs quantitative methodologies. Since quantitative research largely uses statistical and empirical research procedures to get its results, it is generally regarded as "real science." The scientific disciplines, cultural studies, education, management, and other fields frequently employ quantitative methodologies. Its core

characteristics set it apart from qualitative research (Surana et al., 2020). Numerous frameworks for evaluating hypotheses are built and evaluated during quantitative research utilizing a standardized framework. It is crucial to statistically and analytically examine these hypotheses. Prior to selecting study subjects, a random sample procedure must be used. A reference group is also necessary. One element must typically be altered at a time while doing research; otherwise, the descriptive statistics may get convoluted. That ought to allow other academics to carry out a related study as well.

The application of quantitative research techniques allows for the rigorous evaluation and quantification of data. This tactic falls under the three categories listed below:

1) The inferential method is used to infer conclusions from a set of facts. The research seeks to link the features of statistical sampling to the complete population by using traits that are shared by everyone. The author's goal is to examine the data, come to unexpected conclusions, and utilize illustrative data to explain these findings (Slesarev, 2022).

2) Experimental Approach: The experimental approach is used to look at how one demographic characteristic impact another whenever any of those variables are altered. These studies fall within the umbrella of science, which includes "physics." An experimental technique offers a deeper level of oversight over the research environment (Surana et al., 2020).

3) Simulation Approach: What sets the simulation approach apart from other quantitative research techniques is the kind of environment it operates in. Unlike other methods that are constrained by the real world, the simulation methodology operates in a closed environment.

The methods listed below are capable of obtaining quantitative data:

1) Observation: Inspection is the process of a person (in this case, an investigator) evaluating and evaluating a phenomenon and recording data.

2) Questionnaire: A survey is the systematic collection of data from people who make up a sample group. Survey data is typically collected using questionnaires that can be sent physically or electronically to the sample group.

3) Experiments: Participants are divided into two teams for an experiment: an experimental team, and a comparison group. The comparison group does not take part in the experiment; only the experimental party does.

The study uses the **Quantitative approach** due to the following reasons:

A broad knowledge of behavior along with additional phenomena in many contexts and groups is the goal of quantitative researchers. Investigations using numbers are frequently quick, precise, factual, and understandable (Khanna, 2023). Numerous investigators are drawn to the quantitative technique because of its effectiveness and rapidity. Even with huge sample numbers, data processing technology enables rapid data processing and analysis. Instruments used to gather and analyze quantitative data include polls, questionnaires, statistical analysis programs, and temperature sensors. Whenever a study's goal is to evaluate an issue or provide a "what" or "how many" to a topic of study, investigators frequently employ quantitative data. Understanding the link between a separate variable as well as any number of dependent factors in a sample is the main aim of quantitative research investigations. Researchers can express quantitative findings intelligibly by employing objective statistics (Khanna, 2023). A properly executed study enables researchers to extrapolate conclusions and generalizations from the test group to broader, more diverse populations (Slesarev, 2022). Studies in the humanities can especially benefit from this. The focus is on quantitative research. The research helps to verify the initial idea and ascertain if it is accurate or wrong, and the aims and strategy of the investigation are predetermined from the outset. The ease and oversight appeal to researchers. Quantitative studies are relevant if they have been well-designed since they are intended to create predictions, find facts, and evaluate pre-existing ideas. By identifying data that either supports or refutes the theory, researchers employ these investigations to evaluate hypotheses about the reasons why specific occurrences occur.

3.2 Population and Sample

Non-probability sampling involves a sampling strategy where samples are chosen by the investigator based on their own judgment as opposed to by chance. It represents a less strict approach. This sampling technique strongly relies on the investigators' knowledge. Researchers frequently use it for mixed research since it is carried out through observation. In contrast to probability sampling, non-probability sampling does not give each and every member of the sample an equal opportunity of taking advantage of the research. There is a known probability that each person in the population will be chosen. The best uses for non-probability sampling are experimental research and pilot surveys, which include administering surveys to a smaller sample than originally planned. When random sampling using probability is not practicable owing to time or money constraints, researchers adopt this approach (Slesarev, 2022).

Using a non-probability sampling strategy called convenience sampling, choices from members of the population are picked only if they are easily accessible to the investigator. Researchers chose these samples only out of convenience; they did not think about selecting an assortment that accurately reflects the total population. Testing a sample which is representative of the general population is preferable while doing research (Tyagi, 2022). However, in certain studies, the population is too big to look at and take into account. a combination of its rapidity, cost-effectiveness, and simplicity of sample accessibility, convenience sampling—the most popular non-probability sampling technique—is frequently used by researchers.

The current study uses ***Convenience sampling under non-probability sampling techniques*** due to the following reasons:

Convenience sampling often costs little money and is simple to do with easily accessible participants. Convenience sampling enables researchers to collect data which might not have been accessible in the absence of a sample frame. Convenience sampling can assist

researchers in collecting information for exploratory research which can be utilized to develop a compelling hypothesis as well as a research topic.

The participants chosen for the current research will comprise *employees employed in EdTech start-ups in emerging markets such as India*. The reason behind selecting this category of recipients since they have precise insight into the work responsibilities of leaders and their impact on the scaling and growth of EdTech start-ups (Tyagi, 2022).

3.3 Data Collection

A data collection method, framework, or pattern alludes to a collection of ideas, convictions, or understandings that permit the application of concepts and practices. The two scholarly philosophies that comprise the majority of paradigms typically formed are positivism and interpretivism. Each research project uses one of the aforementioned paradigms as a guide to help it develop its research methods and conduct it in the most ethically and logically sound way possible. Even though there were only two paradigms in reality, many new paradigms, particularly in social science research, were influenced by these two. Remember that picking a paradigm for a particular research topic necessitates a full comprehension of its distinctive features (Slesarev, 2022). Any study must choose a paradigm since it creates the framework for the approach and topic examination. A paradigm that examines data analysis and examination clearly outlines the article's goal, inspiration, and anticipated results. When research paradigms are used correctly, analysts have a clear path to take as they delve into the subject of interest. As a consequence, it not only increases the task's quality and overall competence but also provides a reasoned and deliberate basis for carrying it out. The positivist concept holds that knowledge may be discovered by measuring and impartially monitoring actions, movements, or reactions. According to positivism, nothing can be determined with any degree of certainty if it is not evaluated in this way. Evidence gained through experience, regardless of relevance or evaluation of hypotheses, is how empirical cognition develops. This states that anything is of little or no significance if it cannot be observed and so quantified in a precise way. The methods used to collect statistical data and positivism are closely connected (Khanna,

2023). The positivist method emphasizes the necessity of carrying out numerical modeling, such as comprehensive surveys, in order to provide an in-depth image of society and discover cultural mores, including the relationship between academic success and socioeconomic level. This method of studying demography is far more concerned with large-scale trends and structures than it is with solitary individuals. Interpretivism is based on the idea that reality is arbitrary, complex, and socially constructed. In conclusion, academics can only comprehend another person's world from their own viewpoint. This perception could be distinct from that of another individual and influenced by that latter's past experiences or present social circumstances. Interpretive techniques rely on both inquiry and assessment to learn more about the subject being studied or to generate it. This is strongly related to information-collecting techniques. It can have an impact on research initiatives and individuals just starting to study metaphysics since it provides a contextual underpinning for widely held philosophical beliefs. It can act as a springboard for further research into research methodologies and as a guide for choosing the values that will guide research efforts.

For gathering and analyzing data, the two major relevant research approaches seem to be quantitative and qualitative (Khanna, 2023). The type of data the analyst needs will determine the research technique. Information might be categorized as either quantitative or qualitative. Quantifiable data must be evaluated using conventional statistical methods since this data can be quantified. Calculating the average, percentile, sample variance, covariance, and many other quantitative evaluation criteria may be done using software like SPSS or R. Literature review is necessary for the understanding of primary analysis, which can be textual or visual. Statements and keywords are categorized and divided into subcategories during topic evaluation. Linkages between emerging topics may be seen while the material was being transcribed. Using programmes like Atlas.ti or NVivo makes creating a conceptual framework simple. During descriptive research, analysts may use both quantitative and qualitative data. Using descriptive research, observational data in a naturalistic setting are reported (Kumari and Srivastava, 2022). Only statistical approaches

are capable of supporting the experimental study. Experimental study modifies variables to examine a hypothesis in the hopes of coming to a conclusion. Understanding the type of research, a researcher will do is essential. When conducting primary research, the researcher will actively take part in the information collection procedure. When performing secondary research, a researcher solely consults published sources. Primary and secondary research each have benefits and drawbacks. Despite the fact that primary research may be quite costly and time-consuming, it offers the researcher authority over the data. Although secondary research is common, the researcher still has to make sure the information is accurate.

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3) Experiments: Participants are divided into two teams for an experiment: an experimental team, and a comparison group. The comparison group does not take part in the experiment; only the experimental party does.

The study uses the *Survey data collection method of the Quantitative approach* due to the following reasons:

Researchers can obtain information on a specific area of expertise using surveys. Surveys are often used by businesses to learn what the general public thinks of a product or advertising strategy. The survey technique can be used by an investigator to collect data for study or to find out what customers think of their products (Silk, 2022).

Investigators may employ surveys to acquire information on demographic attitudes, promotion and advertisement, as well as develop or test novel characteristics. Surveys can produce a wide range of statistics (Korreck, 2019). A speedier and more affordable option to a data gathering technique like observation is to conduct a survey of individuals in-person, by correspondence, or digitally. The process of contacting respondents and gathering data for surveys frequently takes less time and money. Because collecting and assessing survey questions is typically an easy procedure, data analysis may be done quickly. If researchers have a tight deadline or a large number of outcomes, this is helpful.

3.5 Instrumentation Procedure

The poll will be conducted using a closed-ended questionnaire. Raw, first-hand information was gathered directly from the selected individuals as primary data. Closed-ended questions were chosen with the intention of simplifying and streamlining the survey procedure for respondents (Täuscher and Kietzmann, 2017).

Closed-ended questions feature prepared responses from which responders can select. Sometimes a one-word response, such as "yes" or "no," or "true" or "false," might be used to respond to a closed-ended inquiry. Other kinds provide a selection of multiple-choice responses. Since they make it possible to gather quantitative data which can be tallied from scores, proportions, or statistics which can be followed over time, close-ended questions are frequently employed in surveys. Closed-ended questions are most effective when the researcher knows exactly which subjects, they want input on and whenever they want to gather the information that can be quickly separated for reporting. Since the inquiries themselves are shorter, the response percentage is higher overall. Since the information is simpler to analyze and measure overall feelings, the investigator could take action on feedback more quickly. They won't need to painstakingly sort through qualitative comments and can determine if the results are satisfactory almost immediately (National University, 2021).

3.6 Data Analysis

Although several groups, organizations, and specialists handle data analysis in various ways, the majority of them may be boiled down into a general description. Data analysis refers to the procedure of modifying, processing, and cleansing raw data in order to obtain useful, pertinent information that supports commercial decision-making. The process offers helpful insights and data, frequently displayed in charts, graphics, and tables, including graphs, which lessen the risks associated with decision-making (Singh, 2023). Every time people make choices in ordinary situations, they may observe a basic example of data analysis by assessing what has taken place in previous years or exactly what will occur if they take that action. In its simplest form, this process involves looking at the history or destiny and coming to a choice on the basis of the results of the analysis.

Sorting over information is a significant portion of an investigator's job. That is the exact meaning of the word "research." But even the most devoted researcher might get overwhelmed by the tidal flood of data that the modern era of information creates on a regular basis. From a high-level perspective, data evaluation:

1. It is essential for condensing this material into a more precise and pertinent form, facilitating the work of researchers (Wasdani et al., 2022).

2. Gives scholars access to a wide range of diverse techniques, including quantitative analysis, inferential analysis, including descriptive statistics.

3. Provides academics with better data and improved tools for studying and analyzing that data.

Quantitative data assessment/analysis: Statistical data analysis techniques gather unprocessed information and convert it to numerical information. Among the quantitative analysis techniques are:

- Testing hypotheses to see whether they are true in relation to a certain data collection or demography.

- By breaking down the total of an array of values by the total number of things in the collection, the mean or average may be used to establish a subject's general trend.
- A tiny sample is chosen from an increased number of people and analyzed in the sample quantity determination process. The findings are regarded as being indicative of the structure as a whole (Wasdani et al., 2022).

The current study has employed the Statistical data analysis approach wherein it has employed the ***Descriptive analysis model*** in order to use the insights and data gathered from the primary as well as the secondary data. The reason for choosing this particular model is due to the following:

The concern "What happened?" is answered using statistical analysis. Gathering data, evaluation, modeling, comprehension, and display utilizing dashboards are all included in this examination.

Descriptive: Descriptive analysis uses either all of the statistical information or only a subset of it. It depicts longitudinal data's averages and variances as well as discrete data's proportions as well as occurrences.

3.7 Limitations

Substantial statistical analysis must be performed for the quantitative investigation, which might be challenging for investigators without statistical training. Since statistical analysis heavily depends on scientific methodology, it is challenging for non-mathematicians to complete. The quantitative research process in the field of social science, schooling or learning, and Anthropological research, including psychology is far more difficult (Tyagi, 2022). Instead of merely giving a yes or no answer, the appropriate response should take into account the research issue.

3.8 Summary

In quantitative research, the process of statistical validation is rigorous and demanding. Researchers employ statistical methods to analyze and interpret data collected during their

study. The primary objective is to draw meaningful conclusions and make inferences about the population from which the data is collected. However, these conclusions are subject to uncertainty and are not absolute truths. A fundamental aspect of quantitative research is hypothesis testing. Researchers formulate hypotheses to test specific relationships between variables. These hypotheses are often stated as predictions about the population based on the sample data. However, it is important to note that a hypothesis can only be statistically supported or rejected based on the available evidence. It can never be definitively proven true or false, as the sample data is only a subset of the entire population.

To establish statistical validity, rigorous statistical tests to be applied and ensure that the findings are not due to chance or random variation. They must carefully design their experiments or surveys, control for confounding variables, and employ appropriate statistical techniques to analyze the data. The stringent criteria for statistical validation demand more effort, time, and financial resources. Researchers must invest in robust data collection and analysis techniques, which often involve complex statistical software and expertise. Moreover, larger sample sizes may be necessary to enhance the generalizability of the findings to the broader population.

In summary, quantitative research requires rigorous statistical validation to draw meaningful conclusions about the population. The process involves hypothesis testing, careful experimental design, and statistical analyses. However, the inherent uncertainty in the findings necessitates multiple iterations of testing and revision. This commitment to rigor and validity requires a considerable investment of effort, time, and financial resources to enhance the credibility of the research outcomes.

CHAPTER 4:

DATA ANALYSIS

4.1 Introduction

In this concern, the previous chapter was directed towards unveiling the method through which the underlying objectives of the current study can be accomplished. With regard to this, the current chapter aims at showcasing the results acquired through the questionnaire and analyzed using the SPSS software.

4.2 Descriptive Statistics

Descriptive statistics is instrumental in representing the changes that occur in the data acquired. In a simpler and more precise manner, it can be highlighted that descriptive statistics is conducive for delineating the underlying trends, patterns, and implications within the data. As a result of this, the current study uses the descriptive statistics for illustrating the mean, median, mode, standard deviation, and frequency in the data for familiarizing with the responses gained.

4.2.1 Demographic and General Inquiries

To understand the highest count in each query posed and alternative mentioned, frequency analysis was conducted.

Which country is your Head Quarters located?
The table below indicates that 100.0% respondents' Head Quarter is located in India.

 Which country is your Head Quarters located?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	India	400	100.0	100.0	100.0

Is your organization an Ed- Tech Startup?

The table below indicates that 57.5% of respondents were working in an organization that is an Ed- Tech Startup.

The following pie chart also shows a larger piece corresponding to the same.

Table 1: Participants Mix of Ed Tech and Non-Ed Tech

Is your organization an EdTech Startup?					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	6	1.5	1.5	1.5
	Yes	230	57.5	57.5	59.0
	Yes, it's EdTech but no more a startup. We have already achieved the critical business mass	164	41.0	41.0	100.0
	Total	400	100.0	100.0	
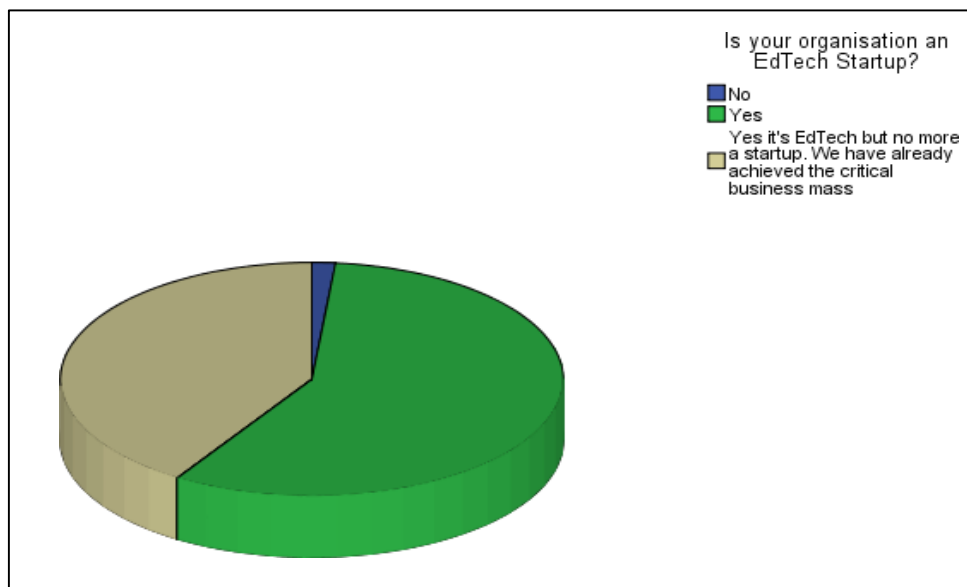
Figure 2: Participants Mix of Ed Tech and Non-Ed Tech

Gender

The table below indicates that 78.3% of respondents were male.

The following pie chart also shows a larger piece corresponding to the same.

Table 2: Gender % of Respondent, Male/Female Ratio

Your gender?					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Female	87	21.8	21.8	21.8
	Male	313	78.3	78.3	100.0
	Total	400	100.0	100.0	
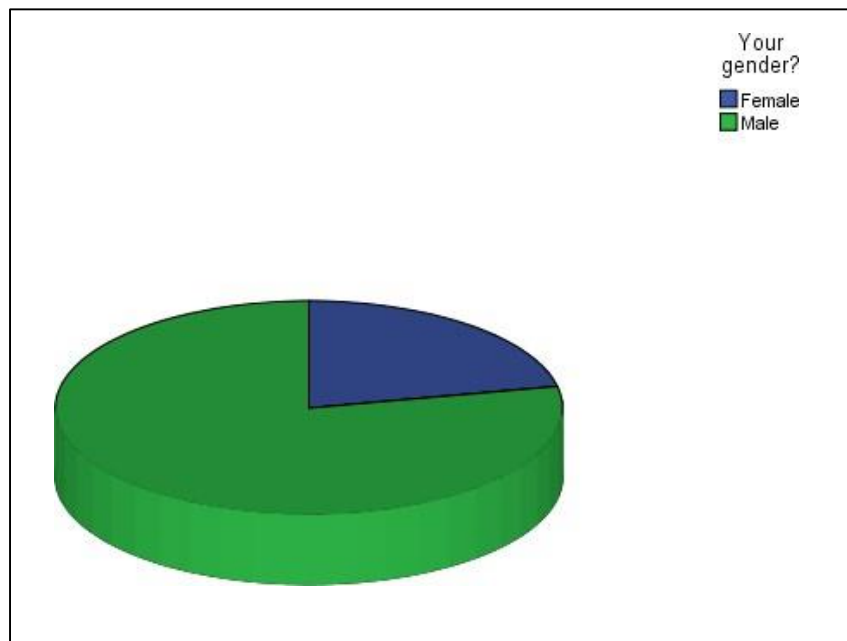
Figure 3: Gender % of Respondent, Male/Female Ratio

Age

The table below indicates that 34.5% of respondents were around the age group of around 31- 35 years.

Table 3: Age Mix of Respondent

Your Age?		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	21 – 25 yrs	53	13.3	13.3	13.3
	26 – 30 yrs	105	26.3	26.3	39.5
	31 – 35 yrs	138	34.5	34.5	74.0
	36 – 40 yrs	54	13.5	13.5	87.5
	41 – 45 yrs	28	7.0	7.0	94.5
	46 – 50 yrs	17	4.3	4.3	98.8
	More than 50	5	1.3	1.3	100.0
	Total	400	100.0	100.0	
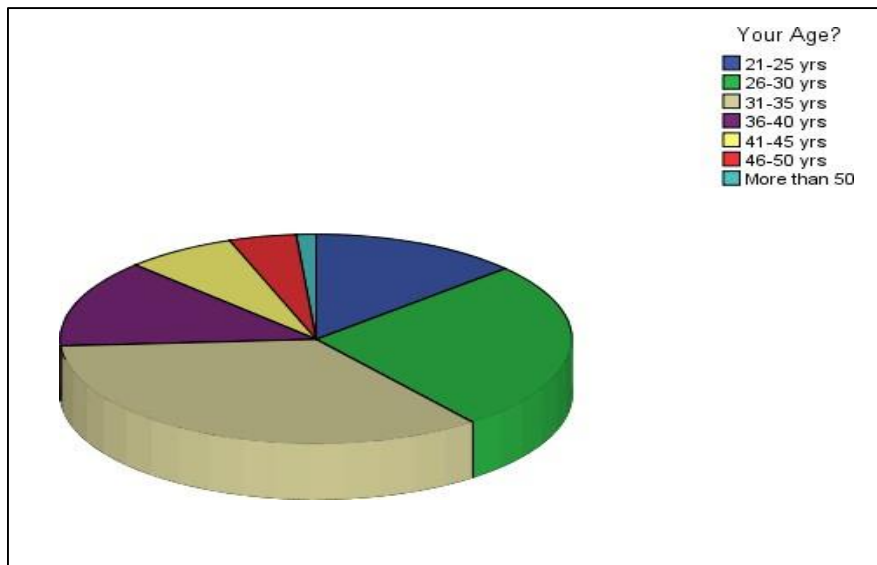
Figure 4: Age Mix of Respondent

Job Profile

The table below indicates that 34.8% of respondents were working as executives.

Table 4: Hierarchical mix of Respondent

Your Job Profile?		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Executives	139	34.8	34.8	34.8
	Manager	123	30.8	30.8	65.5
	Sr. Manager	96	24.0	24.0	89.5
	Top Management	42	10.5	10.5	100.0
	Total	400	100.0	100.0	
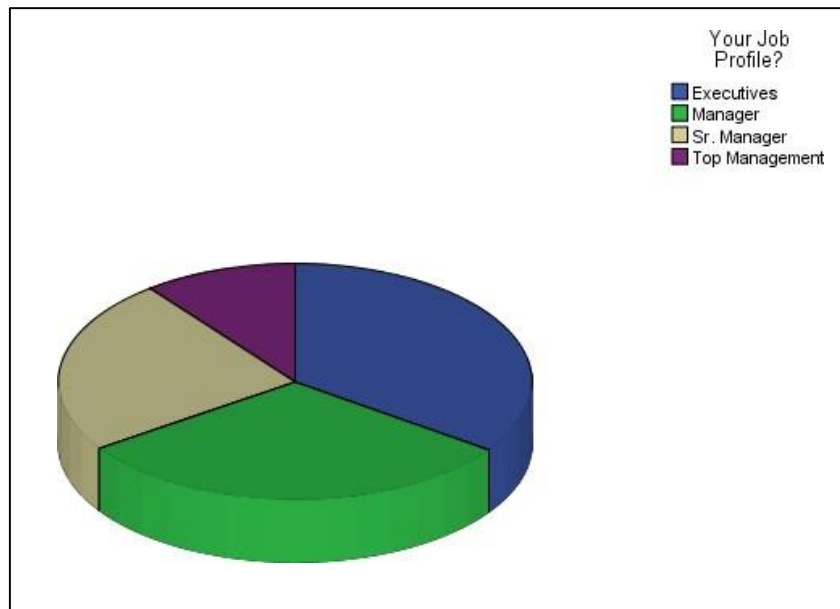
Figure 5: Hierarchical mix of Respondent

Experience

The table below indicates that 40% of respondents have experience of 5 years – 10 years.

Your experience?					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Less than 5 years	132	33.0	33.0	33.0
	5 years- 10 years	160	40.0	40.0	73.0
	11 years-15 years	41	10.3	10.3	83.3
	16 years- 20 years	45	11.3	11.3	94.5
	More than 20 years	22	5.5	5.5	100.0
	Total	400	100.0	100.0	
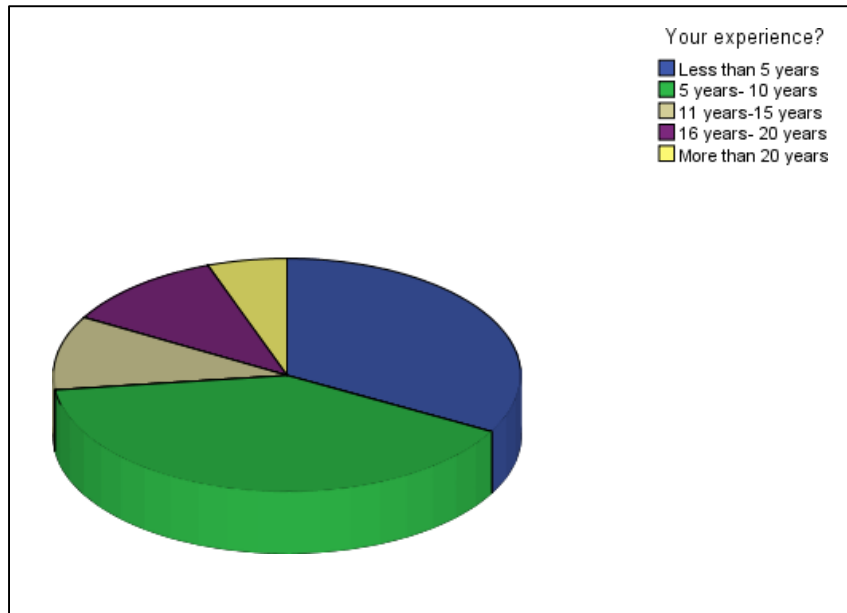
Figure 6: Experience of Respondent

Qualification

The table below indicates that 50.3% respondents are graduates.

The following pie chart also shows larger pie corresponding to the same.

Your Qualification?					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Under-Graduate	7	1.8	1.8	1.8
	Graduate	201	50.3	50.3	52.0
	Post-Graduate	192	48.0	48.0	100.0
	Total	400	100.0	100.0	
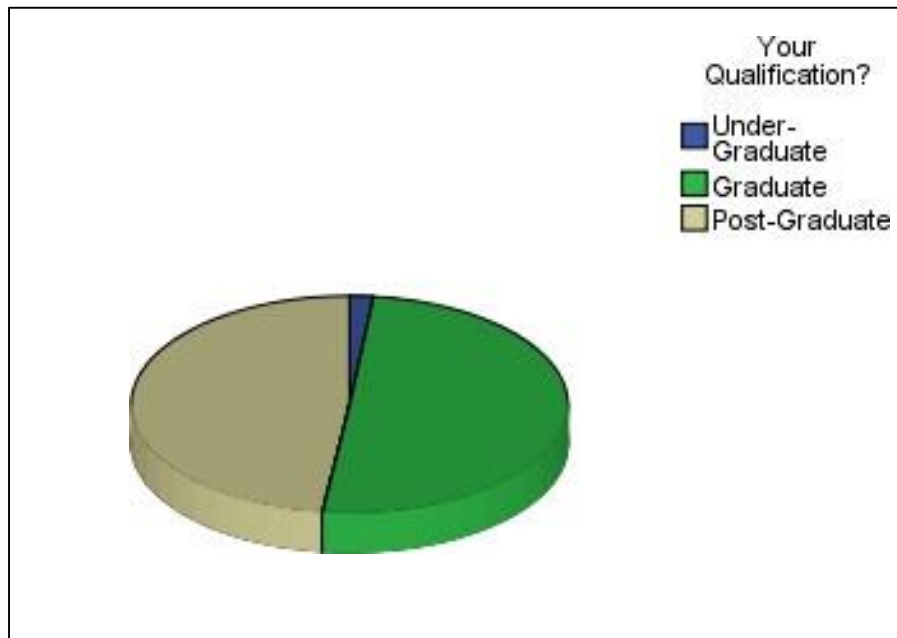
Figure 7: Qualification mixes of Respondent

Annual Income

The table below indicates that 31.5% of respondents are earning around 12,00001-1800000 INR annually.

The following pie chart also shows larger pie corresponding to the same.

Table 7: Annual Income Mix of Respondent

Your Annual Income? (in INR)		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Less than 500000	40	10.0	10.0	10.0
	500000-1200000	120	30.0	30.0	40.0
	1200001-1800000	126	31.5	31.5	71.5
	1800001-2400000	51	12.8	12.8	84.3
	2400001-3600000	25	6.3	6.3	90.5
	3600001-4800000	10	2.5	2.5	93.0
	4800001-6000000	16	4.0	4.0	97.0
	More than 6000000	12	3.0	3.0	100.0
	Total	400	100.0	100.0	

(Note: 1 Lakh = 1,00,000)
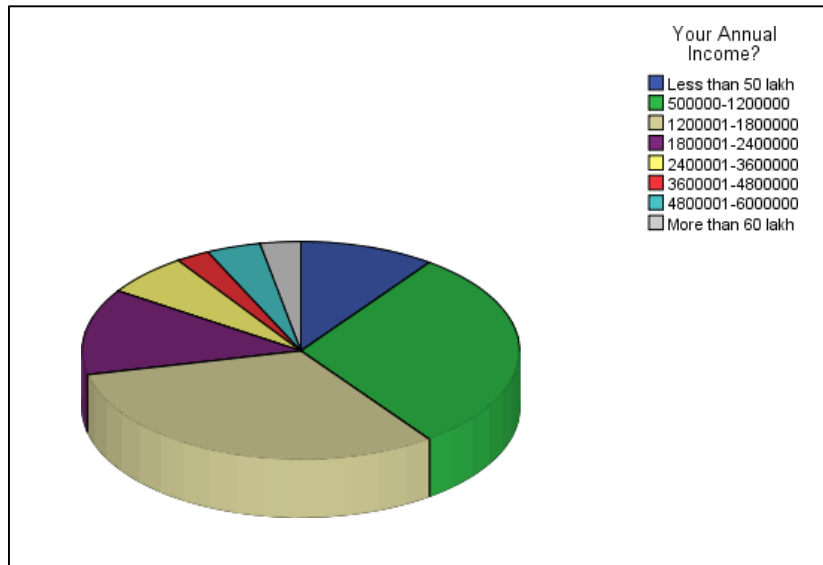
Figure 8: Annual Income Mix of Respondent

4.3 Leadership attributes

Leadership attributes, also known as leadership qualities or traits, refer to the personal characteristics and qualities that make an individual an effective and influential leader.

4.3.1 Adaptability

The table below indicates that 63.5% of respondents agree with the statement. It is perceived that adaptive leaders remain calm while facing uncertain situations during scaling of Ed-tech product start-ups.

Table 8: Response of participants on Leadership Attribute - Adaptability

	Agree		Disagree		Neither Agree nor Disagree		Strongly Agree		Strongly Disagree	
	Count	Row N %	Count	Row N %	Count	Row N %	Count	Row N %	Count	Row N %
It is perceived that adaptive leaders remain calm while facing uncertain situations during scaling of Ed-tech product start-ups	254	63.5%	9	2.2%	58	14.5%	73	18.2%	6	1.5%
It is perceived that adaptive leaders may intolerate postponement and uncertainty at times during scaling of Ed-tech product start-ups	228	57.0%	24	6.0%	64	16.0%	82	20.5%	2	0.5%
It is perceived that the positivity of adaptive leaders regarding the outcome of any new procedure may support the scaling of Ed-tech product start-ups	184	46.0%	20	5.0%	53	13.2%	141	35.2%	2	0.5%
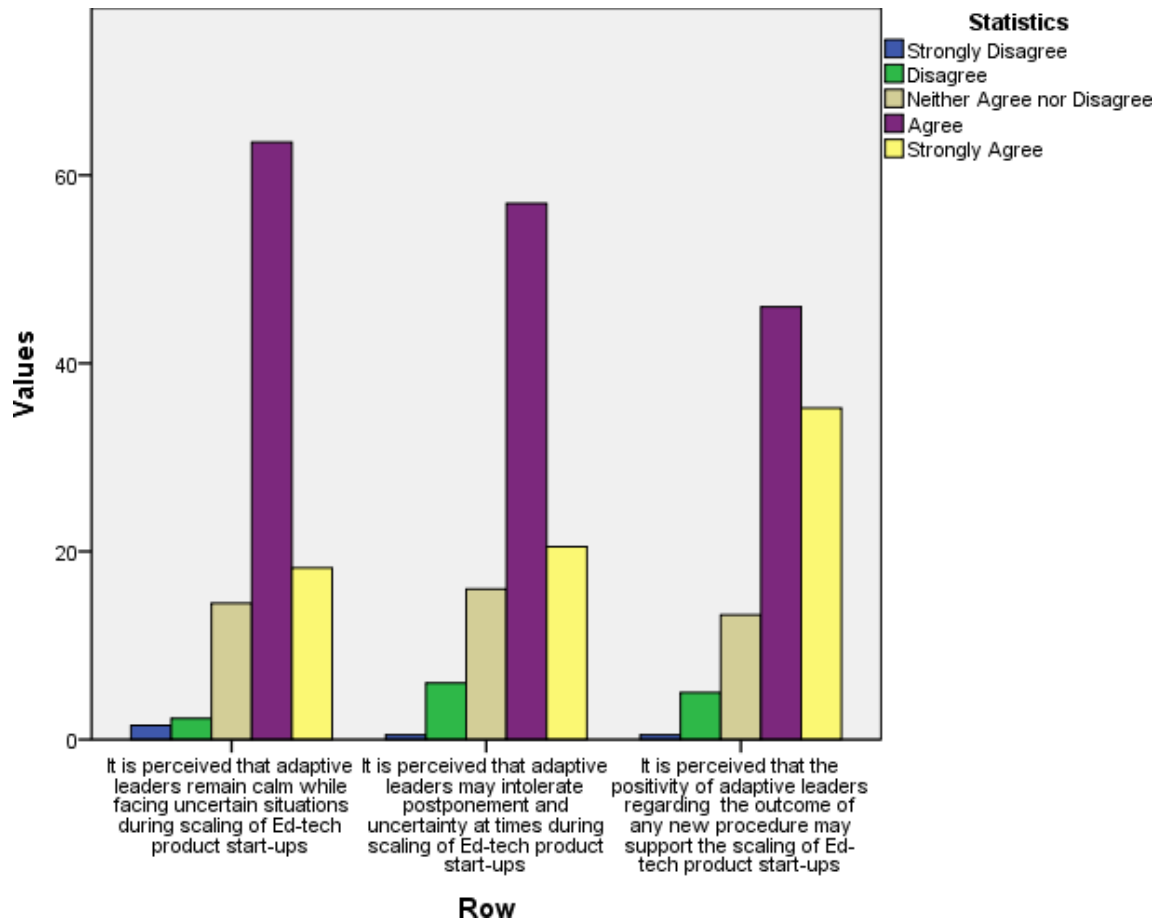
Figure 9: Response of participants on Leadership Attribute – Adaptability

4.3.2 Strong Communication

The table below indicates that 44.2% of respondents strongly agree with the statement. It is perceived that strong communication skills of leaders may help in strong messages being recalled and embraced by employees during the scaling of start-ups.

Table 9: Response of participants on Leadership Attribute – Strong communication

	Strongly Disagree		Disagree		Neither Agree nor Disagree		Agree		Strongly Agree	
	Count	Row N %	Count	Row N %	Count	Row N %	Count	Row N %	Count	Row N %
It is perceived that effective communication by leaders leads to less ambiguity and uncertainty during scaling of Ed-tech product start-ups	3	0.8%	8	2.0%	49	12.2%	163	40.8%	177	44.2%
It is perceived that strong communication skills of leaders may help in strong messages being recalled and embraced by employees during scaling of start-ups	7	1.8%	17	4.2%	58	14.5%	141	35.2%	177	44.2%
It is perceived that strong communication by leaders can motivate and inspire only few employees during scaling of Ed-tech product start-ups	35	8.8%	33	8.2%	111	27.8%	156	39.0%	65	16.2%
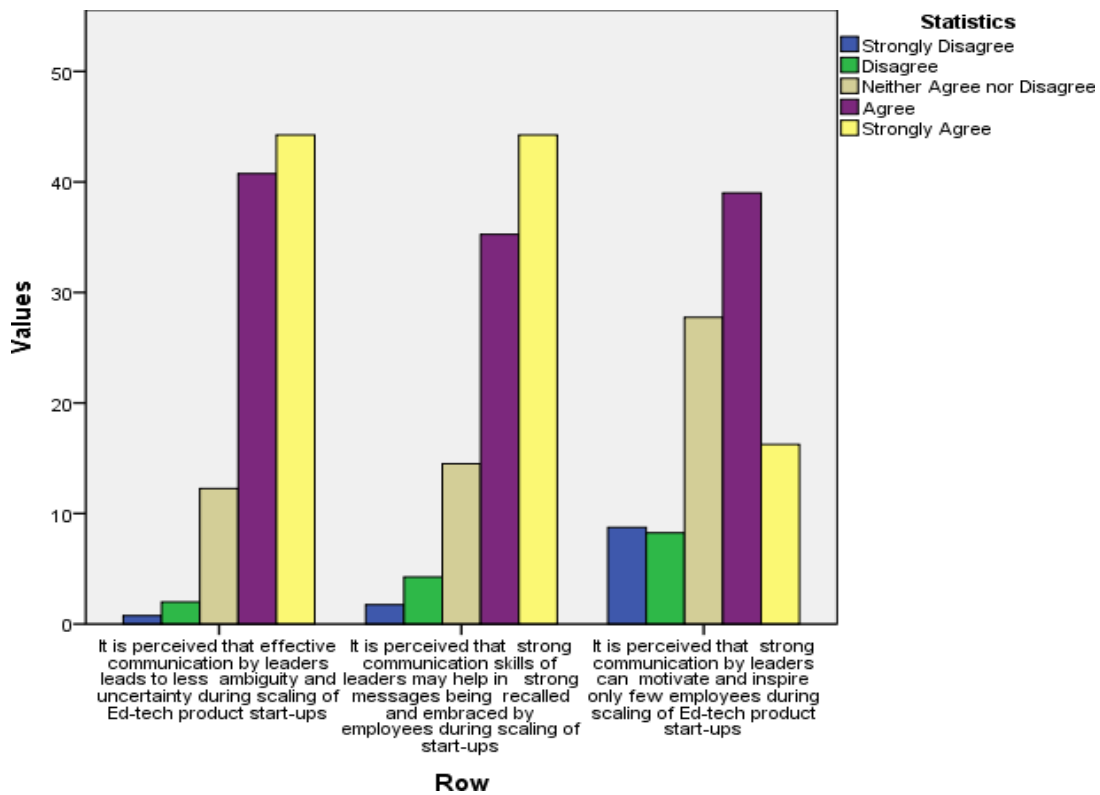
Figure 10:

4.3.3 Interpersonal Skills

The table below indicates that 60.5% of respondents agree with the statement. It is perceived that; a good leader is expected to build solid relationships with those working alone in Ed-tech product start-ups for better results.

Table 10: Response of participants on Leadership Attribute – Interpersonal Skills

	Strongly Disagree		Disagree		Neither Agree nor Disagree		Agree		Strongly Agree	
	Count	Row N %	Count	Row N %	Count	Row N %	Count	Row N %	Count	Row N %
It is perceived that, a good leader is expected to build solid relationships with those working along in Ed-tech product start-ups for better results	0	0.0%	10	2.5%	65	16.2%	242	60.5%	83	20.8%
It is perceived that a strong leader has the ability to understand and optimize non-verbal communications with employees	4	1.0%	19	4.8%	56	14.0%	180	45.0%	141	35.2%
It is perceived that when a strong leader cooperate with others, best results can be achieved during scaling of Ed-tech product start-ups	1	0.2%	10	2.5%	71	17.8%	200	50.0%	118	29.5%
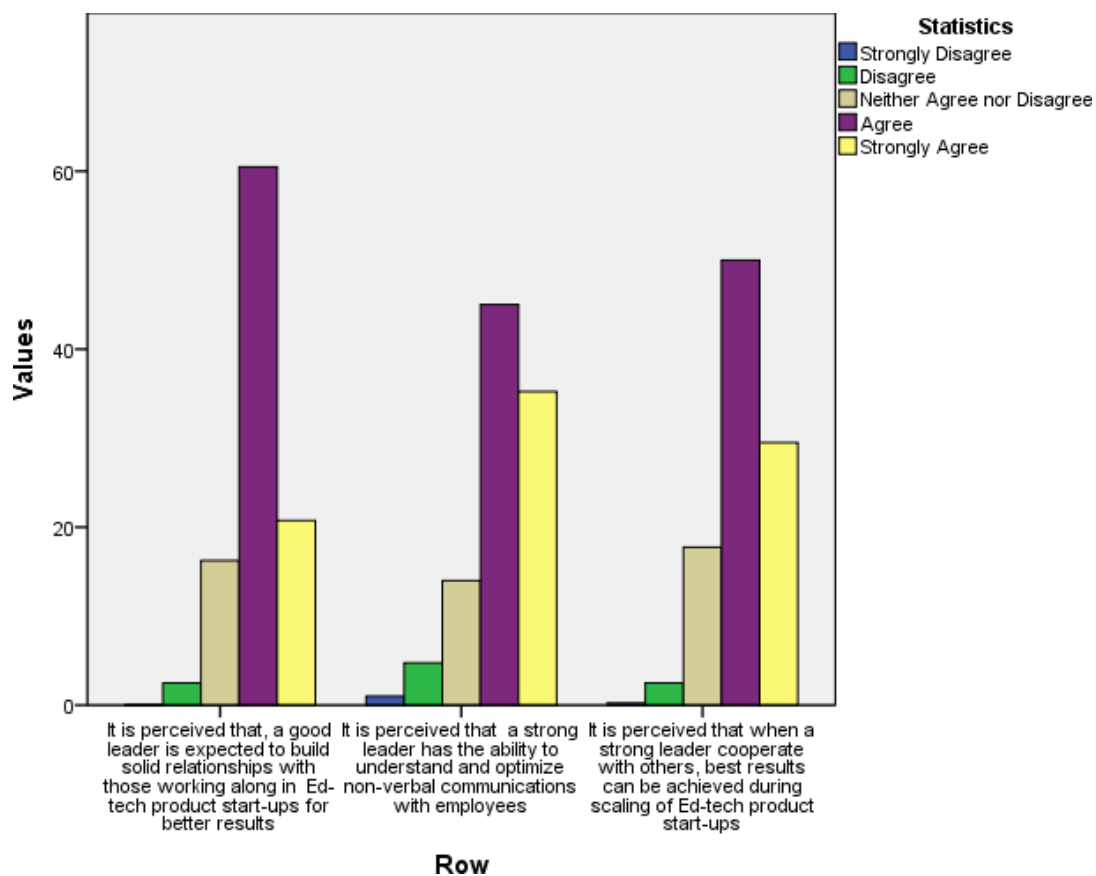
Figure 11: Response of participants on Leadership Attribute – Interpersonal Skills

4.3.4 Creativity

The table below indicates that 54% of respondents agree with the statement. It is perceived that due to a creative leader, followers may be influenced to perform beyond expectations during scaling of Ed-tech product start-ups.

	Strongly Disagree		Disagree		Neither Agree nor Disagree		Agree		Strongly Agree	
	Count	Row N %	Count	Row N %	Count	Row N %	Count	Row N %	Count	Row N %
It is perceived that due to a creative leader follower may get influenced to perform beyond expectations during scaling of Ed-tech product start-ups	4	1.0%	10	2.5%	60	15.0%	216	54.0%	110	27.5%
It is perceived that due to a creative leader, followers may feel stress in making extra efforts to accomplish tasks when conditions are difficult during scaling of Ed-tech product start-ups	18	4.5%	46	11.5%	125	31.2%	148	37.0%	63	15.8%
It is perceived that due to a creative leader follower may get influenced to generate creative solutions for work-related problems during scaling of Ed-tech product start-ups	6	1.5%	26	6.5%	87	21.8%	171	42.8%	110	27.5%
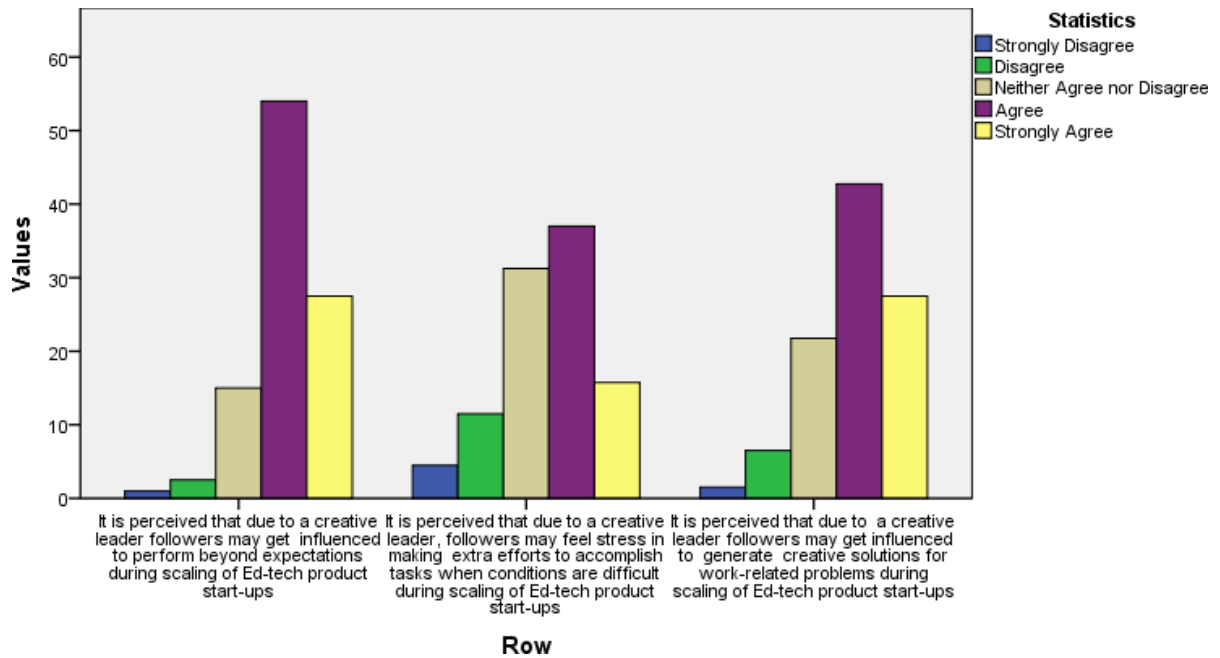
Figure 12: Response of participants on Leadership Attribute – Creativity

4.3.5 Decision Making

The table below indicates that 57.5% of respondents agree with the statement It is perceived that a strong leader happens to make a careful selection of decision-making processes with respect to complexities during the scaling of Ed-tech product start-ups.

Table 12: Response of participants on Leadership Attribute – Decision Making

	Strongly Disagree		Disagree		Neither Agree nor Disagree		Agree		Strongly Agree	
	Count	Row N %	Count	Row N %	Count	Row N %	Count	Row N %	Count	Row N %
It is perceived that a strong leader happens to make a careful selection of decision-making processes with respect to complexities during scaling of Ed-tech product start-ups	0	0.0%	12	3.0%	60	15.0%	230	57.5%	98	24.5%
It is perceived that a strong leader develops the ability to analyse the contingencies in each situation and handle it effectively during scaling of Ed-tech product start-ups	2	0.5%	16	4.0%	75	18.8%	195	48.8%	112	28.0%
It is perceived that a strong leader can misjudge the possibilities during uncertainties during scaling of Ed-tech product start-ups	43	10.8%	45	11.2%	107	26.8%	158	39.5%	47	11.8%
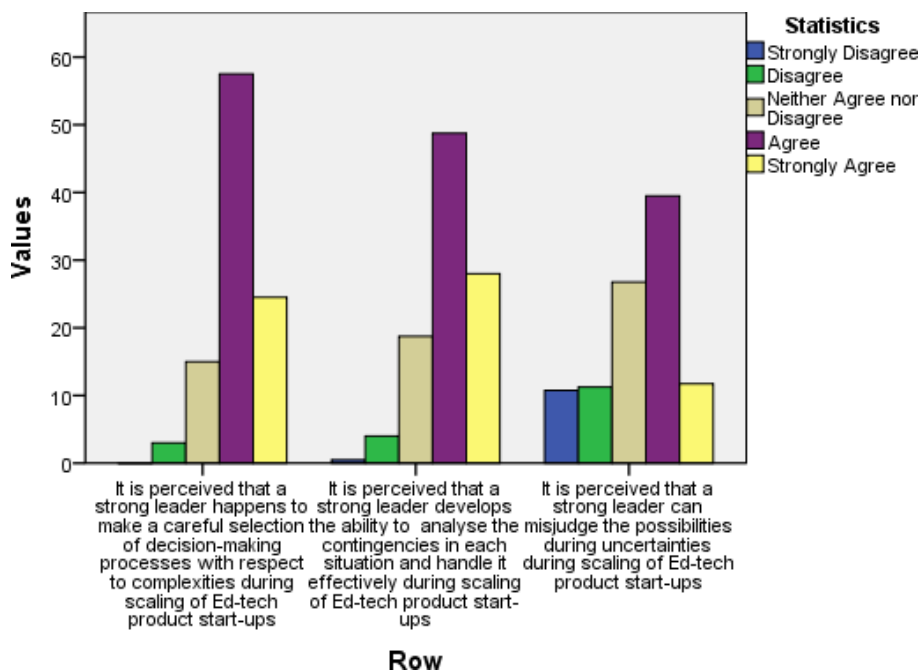
Figure 13: Response of participants on Leadership Attribute – Decision Making

4.3.6 Self-Discipline

The table below indicates that 47.5% of respondents agree with the statement. It is perceived that the success of start-ups in long term is dependent on the leaders, ability to resist temptations.

Table 13: Response of participants on Leadership Attribute – Self-discipline

	Strongly Disagree		Disagree		Neither Agree nor Disagree		Agree		Strongly Agree	
	Count	Row N %	Count	Row N %	Count	Row N %	Count	Row N %	Count	Row N %
It is perceived that the success of start-ups in long term is dependent on the leaders' Aability to resist temptations	13	3.2%	36	9.0%	80	20.0%	190	47.5%	81	20.2%

	Strongly Disagree		Disagree		Neither Agree nor Disagree		Agree		Strongly Agree	
	Count	Row N %	Count	Row N %	Count	Row N %	Count	Row N %	Count	Row N %
It is perceived that due to the leader's inability to tolerate a delay of gratification, employees need to exert more efforts for scaling of start-ups beyond deadlines	22	5.5%	58	14.5%	115	28.7%	140	35.0%	65	16.2%
It is perceived that due to the leader's tendency to impose strict standards of accomplishment upon oneself, the scaling of start-ups is achieved satisfactorily	31	7.8%	63	15.8%	110	27.5%	152	38.0%	44	11.0%
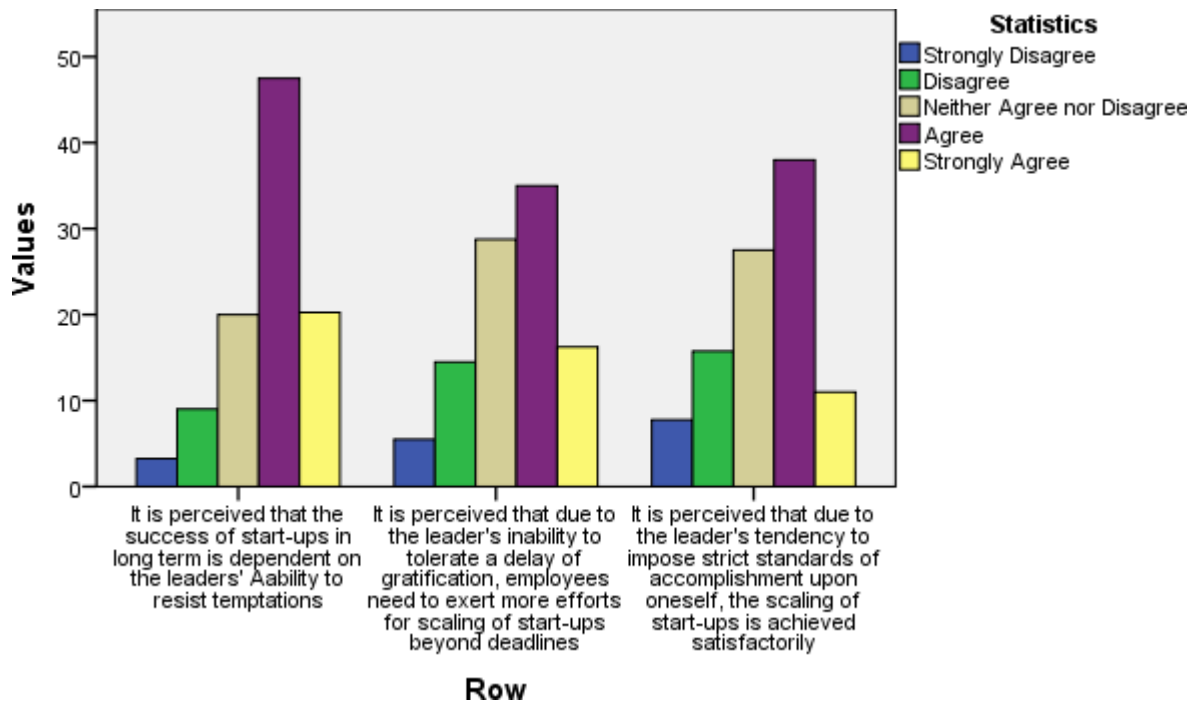
Figure 14

4.3.7 Resilience

The table below indicates that 51.2% respondents agree with the statement It is perceived that the impact of adverse challenges during scaling of start-ups on the employees is dependent on the extent of the resiliency of the leader.

Table 14: Response of participants on Leadership Attribute – Resilience

	Strongly Disagree		Disagree		Neither Agree nor Disagree		Agree		Strongly Agree	
	Count	Row N %	Count	Row N %	Count	Row N %	Count	Row N %	Count	Row N %
It is perceived that the impact of adverse challenges during scaling of start-ups on the employees is dependent on the extent of the resiliency of the leader	2	0.5%	26	6.5%	56	14.0%	205	51.2%	111	27.8%
It is perceived that resiliency of the leader is tested through the strength and flexibility of their systems and resources during scaling of start-ups	1	0.2%	22	5.5%	61	15.2%	204	51.0%	112	28.0%
It is perceived that resiliency of the leader is reflected in the form of the team of employees hired and maintained during scaling of start-ups	13	3.2%	27	6.8%	90	22.5%	173	43.2%	97	24.2%
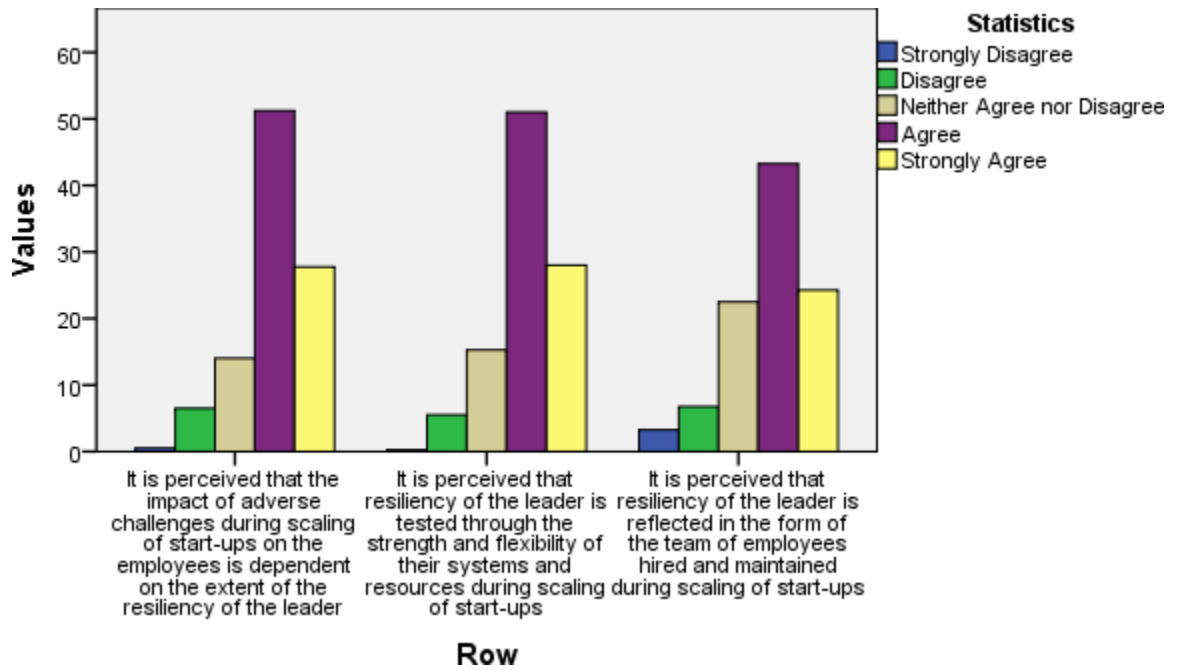
Figure 15: Response of participants on Leadership Attribute – Resilience

4.3.8 Empowerment

The table below indicates that 54.2% of respondents agree with the statement It is perceived that organizational effectiveness during scaling of start-ups is based on the empowering leadership pursued by the start-up leader.

Table 15: Response of participants on Leadership Attribute – Empowerment

	Strongly Disagree		Disagree		Neither Agree nor Disagree		Agree		Strongly Agree	
	Count	Row N %	Count	Row N %	Count	Row N %	Count	Row N %	Count	Row N %
It is perceived that organizational effectiveness during scaling of start-ups is based on the empowering leadership pursued by the start-up leader	10	2.5%	17	4.2%	64	16.0%	217	54.2%	92	23.0%
It is perceived that employees' job performance during scaling of start-ups is based on the empowering leadership pursued by the start-up leader	14	3.5%	29	7.2%	77	19.2%	179	44.8%	101	25.2%
It is perceived that productivity of business during scaling of start-ups is based on the empowering leadership pursued by the start-up leader	3	0.8%	15	3.8%	79	19.8%	206	51.5%	97	24.2%
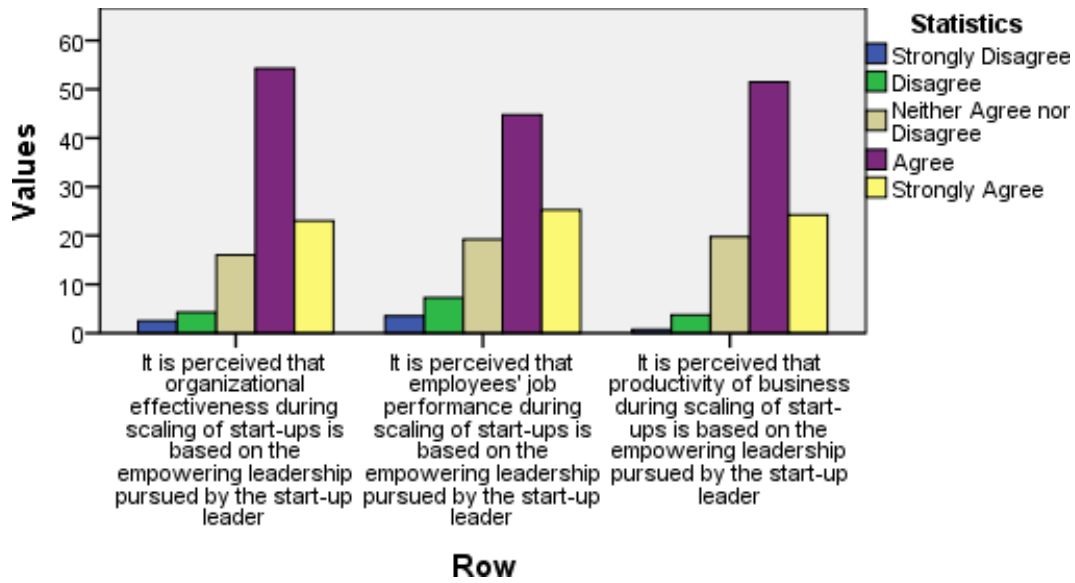
Figure 16: Response of participants on Leadership Attribute – Empowerment

4.4 Ed-Tech Businesses Scaling Performance

The table below indicates that 49.8% of respondents agree with the statement. Strong leadership manages uncertainties and opportunities, leading to higher sales volume for Ed-Tech start-up businesses.

Table 16: Response of participants on Establishing Correlation between Leadership and Business Scalability

	Strongly Disagree		Disagree		Neither Agree nor Disagree		Agree		Strongly Agree	
	Count	Row N %	Count	Row N %	Count	Row N %	Count	Row N %	Count	Row N %
Strong leadership manages uncertainties and opportunities leading to higher sales volume for Ed-Tech start-up businesses	7	1.8%	23	5.8%	66	16.5%	199	49.8%	105	26.2%

114

	Strongly Disagree		Disagree		Neither Agree nor Disagree		Agree		Strongly Agree	
	Count	Row N %	Count	Row N %	Count	Row N %	Count	Row N %	Count	Row N %
Strong leadership makes strong decisions leading to higher profit margins for Ed-Tech start-up businesses	6	1.5%	27	6.8%	58	14.5%	170	42.5%	139	34.8%
Strong leadership looks for creative and possible solution leading to higher sales with better profit margins for Ed-Tech start-up businesses	3	0.8%	26	6.5%	44	11.0%	158	39.5%	169	42.2%

Figure 17: Response of participants on Establishing Correlation between Leadership and Business Scalability

4.5 Reliability Statistics

Cronbach's Alpha is a reliability test conducted within SPSS in order to measure the internal consistency i.e., reliability of the measuring instrument.

It is most commonly used when the questionnaire is developed using multiple Likert scale statements (1=Strongly disagree, 2=disagree, 3=Neutral, 4=Agree, 5=Strongly Agree) and therefore to determine if the scale is reliable or not.

Below table, shows reliability statistics of sample data of 400 sample size. Here we can see that Cronbach's alpha (0.8 or >0.8) is 0.825, which indicates good internal consistency for our scale with this specific sample.

Table 17: Reliability Statistics

Cronbach's Alpha	N of Items
0.825	27

Table 18: Item Statistics: Mean and Standard Deviation

	Mean	Std. Deviation	N
It is perceived that adaptive leaders remain calm while facing uncertain situations during scaling of Ed-tech product start-ups	3.95	0.742	400
It is perceived that adaptive leaders may intolerate postponement and uncertainty at times during scaling of Ed-tech product start-ups	3.91	0.802	400
It is perceived that the positivity of adaptive leaders regarding the outcome of any new procedure may support the scaling of Ed-tech product start-ups	4.11	0.849	400

	Mean	Std. Deviation	N
It is perceived that effective communication by leaders leads to less ambiguity and uncertainty during scaling of Ed-tech product start-ups	4.26	0.805	400
It is perceived that strong communication skills of leaders may help in strong messages being recalled and embraced by employees during scaling of start-ups	4.16	0.944	400
It is perceived that strong communication by leaders can motivate and inspire only few employees during scaling of Ed-tech product start-ups	3.46	1.125	400
It is perceived that, a good leader is expected to build solid relationships with those working along in Ed-tech product start-ups for better results	4.00	0.686	400
It is perceived that a strong leader has the ability to understand and optimize non-verbal communications with employees	4.09	0.876	400
It is perceived that when a strong leader cooperate with others, best results can be achieved during scaling of Ed-tech product start-ups	4.06	0.770	400
It is perceived that due to a creative leader followers may get influenced to perform beyond expectations during scaling of Ed-tech product start-ups	4.05	0.784	400
It is perceived that due to a creative leader, followers may feel stress in making extra efforts to accomplish tasks when conditions are difficult during scaling of Ed-tech product start-ups	3.48	1.033	400

	Mean	Std. Deviation	N
It is perceived that due to a creative leader followers may get influenced to generate creative solutions for work-related problems during scaling of Ed-tech product start-ups	3.88	0.936	400
It is perceived that a strong leader happens to make a careful selection of decision-making processes with respect to complexities during scaling of Ed-tech product start-ups	4.04	0.718	400
It is perceived that a strong leader develops the ability to analyse the contingencies in each situation and handle it effectively during scaling of Ed-tech product start-ups	4.00	0.821	400
It is perceived that a strong leader can misjudge the possibilities during uncertainties during scaling of Ed-tech product start-ups	3.30	1.149	400
It is perceived that the success of start-ups in long term is dependent on the leaders' Aability to resist temptations	3.73	0.991	400
It is perceived that due to the leader's inability to tolerate a delay of gratification, employees need to exert more efforts for scaling of start-ups beyond deadlines	3.42	1.092	400
It is perceived that due to the leader's tendency to impose strict standards of accomplishment upon oneself, the scaling of start-ups is achieved satisfactorily	3.29	1.099	400
It is perceived that the impact of adverse challenges during scaling of start-ups on the employees is dependent on the extent of the resiliency of the leader	3.99	0.851	400

|	Mean	Std. Deviation	N
It is perceived that resiliency of the leader is tested through the strength and flexibility of their systems and resources during scaling of start-ups	4.01	0.823	400
It is perceived that resiliency of the leader is reflected in the form of the team of employees hired and maintained during scaling of start-ups	3.79	0.993	400
It is perceived that organizational effectiveness during scaling of start-ups is based on the empowering leadership pursued by the start-up leader	3.91	0.883	400
It is perceived that employees' job performance during scaling of start-ups is based on the empowering leadership pursued by the start-up leader	3.81	1.008	400
It is perceived that productivity of business during scaling of start-ups is based on the empowering leadership pursued by the start-up leader	3.95	0.810	400
Strong leadership manages uncertainties and opportunities leading to higher sales volume for Ed-Tech start-up businesses	3.93	0.901	400
Strong leadership makes strong decisions leading to higher profit margins for Ed-Tech start-up businesses	4.02	0.948	400
Strong leadership looks for creative and possible solution leading to higher sales with better profit margins for Ed-Tech start-up businesses	4.16	0.915	400

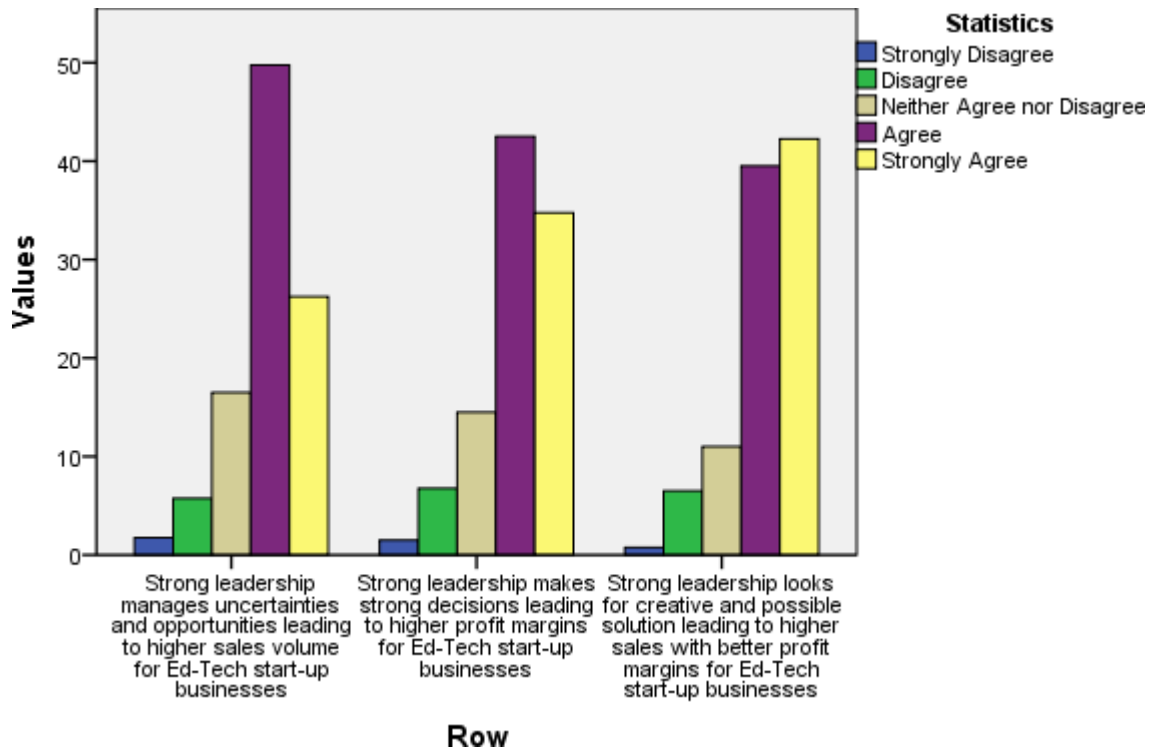| Item Statistics			
	Mean	Std. Deviation	N
ADAPTABILITY (1)	3.95	0.742	400
ADAPTABILITY (2)	3.91	0.802	400
ADAPTABILITY (3)	4.11	0.849	400
STRONG COMMUNICATION (1)	4.26	0.805	400
STRONG COMMUNICATION (2)	4.16	0.944	400
STRONG COMMUNICATION (3)	3.46	1.125	400
INTERPERSONAL SKILLS (1)	4.00	0.686	400
INTERPERSONAL SKILLS (2)	4.09	0.876	400
INTERPERSONAL SKILLS (3)	4.06	0.770	400
CREATIVITY (1)	4.05	0.784	400
CREATIVITY (2)	3.48	1.033	400
CREATIVITY (3)	3.88	0.936	400
DECISION MAKING (1)	4.04	0.718	400
DECISION MAKING (2)	4.00	0.821	400
DECISION MAKING (3)	3.30	1.149	400
SELF-DISCIPLINE (1)	3.73	0.991	400
SELF-DISCIPLINE (2)	3.42	1.092	400
SELF-DISCIPLINE (3)	3.29	1.099	400
RESILIENCE (1)	3.99	0.851	400
RESILIENCE (2)	4.01	0.823	400
RESILIENCE (3)	3.79	0.993	400
EMPOWERMENT (1)	3.91	0.883	400
EMPOWERMENT (2)	3.81	1.008	400
EMPOWERMENT (3)	3.95	0.810	400
SCALING PERFORMANCE (1)	3.93	0.901	400
SCALING PERFORMANCE (2)	4.02	0.948	400
SCALING PERFORMANCE (3)	4.16	0.915	400

4.6 Factor Analysis

Factor analysis is a statistical method used to explore the underlying structure of a set of observed variables. Its main purpose is to identify the latent factors or underlying constructs that explain the patterns of correlations among the observed variables. This technique is commonly employed in various fields, including psychology, social sciences, marketing, economics, and other disciplines where understanding the underlying relationships among multiple variables is essential.

In factor analysis, it is assumed that the observed variables are influenced by a few common factors and some unique factors that are specific to each variable. The common factors represent the shared variance among the observed variables, while the unique factors represent the variance that is specific to each variable and not explained by the common factors.

4.6.1 KMO & Bartlett Test

The table below consists of certain statements related to your agreeableness on the impact of leadership on scaling startups in Ed tech products in emerging markets such as India. (On a scale of 1-5, please indicate the degree to which you are satisfied with the statements below. (1=Strongly disagree, 2=disagree, 3=Neutral, 4=Agree, 5=Strongly Agree)

The KMO and Bartlett test prove the adequacy of the variables, where the KMO measures the sampling adequacy which should be greater than 0.5 for satisfactory factor analysis, and Bartlett's test is another indication of the strength of the relationship among variables.

KMO and Bartlett help in understanding the variance in the variables. Bartlett test shows the redundancy between variables that can be summarized with some factors. KMO shows the proportion of variance among variables. Therefore, these tests are used for Factor Analysis which attempts to identify underlying variables that explain the pattern of correlations within a set of observed variables, it is also helpful in identifying collinearity before performing a linear regression analysis, thereby, helping to prove the hypothesis.

121

The KMO measures the sampling adequacy (which determines if the responses given with the sample are adequate or not) which should be close to 0.5 for a satisfactory factor analysis to proceed. Kaiser recommends 0.5 (value for KMO) as minimum (barely accepted), values between 0.7-0.8 acceptable, and values above 0.9 are superb. Looking at the table below, the KMO measure is 0.861, which is greater than 0.5 which indicates that the sample is sufficient and we can proceed with the factor analysis.

The Bartlett's test of Sphericity is used to test the null hypothesis that the correlation matrix is an identity matrix. An identity correlation matrix means your variables are unrelated and not ideal for factor analysis.

A significant statistical test (usually less than 0.05) shows that the correlation matrix is indeed not an identity matrix (rejection of the null hypothesis) as represented in the table below.

Bartlett's test is another indication of the strength of the relationship among variables. This tests the null hypothesis that the correlation matrix is an identity matrix.
Bartlett's test of sphericity is performed by taking $\alpha = 0.05$.

Here p-value is less than 0.05, and hence, factor analysis is valid.

Table 20: Item Statistics: KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.828
Bartlett's Test of Sphericity	Approx. Chi-Square	2328.662
	df	351
	Sig.	.000

4.6.2 Communalities

The table of communalities shows how much variance (i.e. the communality value which should be more than 0.5 to be considered for further analysis) in the variables have been accounted by the extracted factors.

Communities – This is the proportion of each variable's variance that can be explained by the factors (e.g., the underlying latent continua). It is also noted as h2 and can be defined as the sum of squared factor loadings for the variables.

Initial – With principal factor axis factoring, the initial values on the diagonal of the correlation matrix are determined by the squared multiple correlation of the variable with the other variables.

Extraction – The values in this column indicate the proportion of each variable's variance that can be explained by the retained factors. Variables with high values are well represented in the common factor space, while variables with low values are not well represented. Here, we don't have any particularly low values.

Table 21: Communalities (Initial and Extraction)		
Communalities		
	Initial	Extraction
It is perceived that adaptive leaders remain calm while facing uncertain situations during scaling of Ed-tech product start-ups	1.000	0.489
It is perceived that adaptive leaders may intolerate postponement and uncertainty at times during scaling of Ed-tech product start-ups	1.000	0.600
It is perceived that the positivity of adaptive leaders regarding the outcome of any new procedure may support the scaling of Ed-tech product start-ups	1.000	0.482

Communalities		
Table 21: Communalities (Initial and Extraction)		
Communalities		
	Initial	Extraction
It is perceived that effective communication by leaders leads to less ambiguity and uncertainty during scaling of Ed-tech product start-ups	1.000	0.526
It is perceived that strong communication skills of leaders may help in strong messages being recalled and embraced by employees during scaling of start-ups	1.000	0.581
It is perceived that strong communication by leaders can motivate and inspire only few employees during scaling of Ed-tech product start-ups	1.000	0.626
It is perceived that, a good leader is expected to build solid relationships with those working along in Ed-tech product start-ups for better results	1.000	0.486
It is perceived that a strong leader has the ability to understand and optimize non-verbal communications with employees	1.000	0.399
It is perceived that when a strong leader cooperates with others, best results can be achieved during scaling of Ed-tech product start-ups	1.000	0.462
It is perceived that due to a creative leader followers may get influenced to perform beyond expectations during scaling of Ed-tech product start-ups	1.000	0.645
It is perceived that due to a creative leader, followers may feel stress in making extra efforts to accomplish tasks when conditions are difficult during scaling of Ed-tech product start-ups	1.000	0.693
It is perceived that due to a creative leader followers may get influenced to generate creative solutions for work-related problems during scaling of Ed-tech product start-ups	1.000	0.595

Communalities		
	Initial	Extraction
It is perceived that a strong leader happens to make a careful selection of decision-making processes with respect to complexities during scaling of Ed-tech product start-ups	1.000	0.484
It is perceived that a strong leader develops the ability to analyze the contingencies in each situation and handle it effectively during scaling of Ed-tech product start-ups	1.000	0.533
It is perceived that a strong leader can misjudge the possibilities during uncertainties during scaling of Ed-tech product start-ups	1.000	0.429
It is perceived that the success of start-ups in long term is dependent on the leaders' Aability to resist temptations	1.000	0.399
It is perceived that due to the leader's inability to tolerate a delay of gratification, employees need to exert more efforts for scaling of start-ups beyond deadlines	1.000	0.611
It is perceived that due to the leader's tendency to impose strict standards of accomplishment upon oneself, the scaling of start-ups is achieved satisfactorily	1.000	0.524
It is perceived that the impact of adverse challenges during scaling of start-ups on the employees is dependent on the extent of the resiliency of the leader	1.000	0.398
It is perceived that resiliency of the leader is tested through the strength and flexibility of their systems and resources during scaling of start-ups	1.000	0.571
It is perceived that resiliency of the leader is reflected in the form of the team of employees hired and maintained during scaling of start-ups	1.000	0.570
It is perceived that organizational effectiveness during scaling of start-ups is based on the empowering leadership pursued by the start-up leader	1.000	0.616

Table 21: Communalities (Initial and Extraction)

Table 21: Communalities (Initial and Extraction)

Communalities

	Initial	Extraction
It is perceived that employees' job performance during scaling of start-ups is based on the empowering leadership pursued by the start-up leader	1.000	0.571
It is perceived that productivity of business during scaling of start-ups is based on the empowering leadership pursued by the start-up leader	1.000	0.533
Strong leadership manages uncertainties and opportunities leading to higher sales volume for Ed-Tech start-up businesses	1.000	0.634
Strong leadership makes strong decisions leading to higher profit margins for Ed-Tech start-up businesses	1.000	0.745
Strong leadership looks for creative and possible solution leading to higher sales with better profit margins for Ed-Tech start-up businesses	1.000	0.756
Extraction Method: Principal Component Analysis.		

Table 22: Communalities for Considered Leadership Parameters

	Initial	Extraction
ADAPTABILITY (1)	1.000	0.489
ADAPTABILITY (2)	1.000	0.600
ADAPTABILITY (3)	1.000	0.482
STRONG COMMUNICATION (1)	1.000	0.526
STRONG COMMUNICATION (2)	1.000	0.581
STRONG COMMUNICATION (3)	1.000	0.626
INTERPERSONAL SKILLS (1)	1.000	0.486
INTERPERSONAL SKILLS (2)	1.000	0.399
INTERPERSONAL SKILLS (3)	1.000	0.462
CREATIVITY (1)	1.000	0.645
CREATIVITY (2)	1.000	0.693
CREATIVITY (3)	1.000	0.595
DECISION MAKING (1)	1.000	0.484

	Initial	Extraction
DECISION MAKING (2)	1.000	0.533
DECISION MAKING (3)	1.000	0.429
SELF-DISCIPLINE (1)	1.000	0.399
SELF-DISCIPLINE (2)	1.000	0.611
SELF-DISCIPLINE (3)	1.000	0.524
RESILIENCE (1)	1.000	0.398
RESILIENCE (2)	1.000	0.571
RESILIENCE (3)	1.000	0.570
EMPOWERMENT (1)	1.000	0.616
EMPOWERMENT (2)	1.000	0.571
EMPOWERMENT (3)	1.000	0.533
SCALING PERFORMANCE (1)	1.000	0.634
SCALING PERFORMANCE (2)	1.000	0.745
SCALING PERFORMANCE (3)	1.000	0.756
Extraction Method: Principal Component Analysis.		

PCA initially extracts 27 factors (or "components"). Each component has a **quality score** called an **Eigenvalue**. Only components with high eigenvalues are likely to represent real underlying factors.

Our 27 variables seem to measure 7 underlying factors.

The initial eigenvalues have all the 27 variables with the percentage of the variance of all the variables with the cumulative percentage of variance. After running factor analysis in SPSS, we get 7 factors which explain the 55.4% of the variance. Any factor which has eigenvalue less < 1 would be selected into a particular factor. This is known as eigenvalue greater 1 selection rule.

This is because only our first 7 components have Eigenvalues of at least 1. The other components -having low quality scores- are not assumed to represent real traits underlying our 27 questions. Such components are considered "scree" as shown by the line chart below.

Table 23: Explanation of Total Variance

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
4.6.3 Total Variance Explained						
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	5.400	20.001	20.001	5.400	20.001	20.001
2	1.974	7.311	27.311	1.974	7.311	27.311
3	1.887	6.989	34.300	1.887	6.989	34.300
4	1.370	5.074	39.374	1.370	5.074	39.374
5	1.175	4.351	43.725	1.175	4.351	43.725
6	1.080	4.000	47.725	1.080	4.000	47.725
7	1.066	3.949	51.674	1.066	3.949	51.674
8	1.006	3.726	55.400	1.006	3.726	55.400
9	0.978	3.623	59.023			
10	0.924	3.421	62.444			
11	0.899	3.329	65.773			
12	0.816	3.023	68.795			
13	0.766	2.838	71.633			
14	0.754	2.794	74.427			
15	0.717	2.656	77.083			
16	0.707	2.620	79.703			
17	0.648	2.400	82.103			
18	0.636	2.355	84.458			
19	0.576	2.134	86.592			
20	0.566	2.097	88.688			
21	0.548	2.030	90.718			
22	0.527	1.953	92.671			
23	0.486	1.800	94.471			
24	0.443	1.639	96.110			
25	0.412	1.525	97.635			
26	0.356	1.320	98.955			
27	0.282	1.045	100.000			
Extraction Method: Principal Component Analysis.						

Based on the scree test, the relevant factors are those whose eigenvalues lie before the sharp bend in the scree plot (graphic depiction of the progression of the eigenvalues). The following figure shows the scree plot of the data:

The scree plot graphs the eigenvalue against the component number. You can see these values in the first two columns of the table immediately above. From the eighth component onwards, you can see that the line is almost flat, meaning each successive component is accounts for smaller and smaller amounts of the total variance.

In general, we are interested in keeping only those principal components whose eigenvalues are greater than 1. Components with an eigenvalue of less than 1 account for less variance than did the original variable (which had a variance of 1), and so are of little use. Hence, you can see that the point of principal components analysis is to redistribute the variance in the correlation matrix (using the method of eigenvalue decomposition) to redistribute the variance to first components extracted.
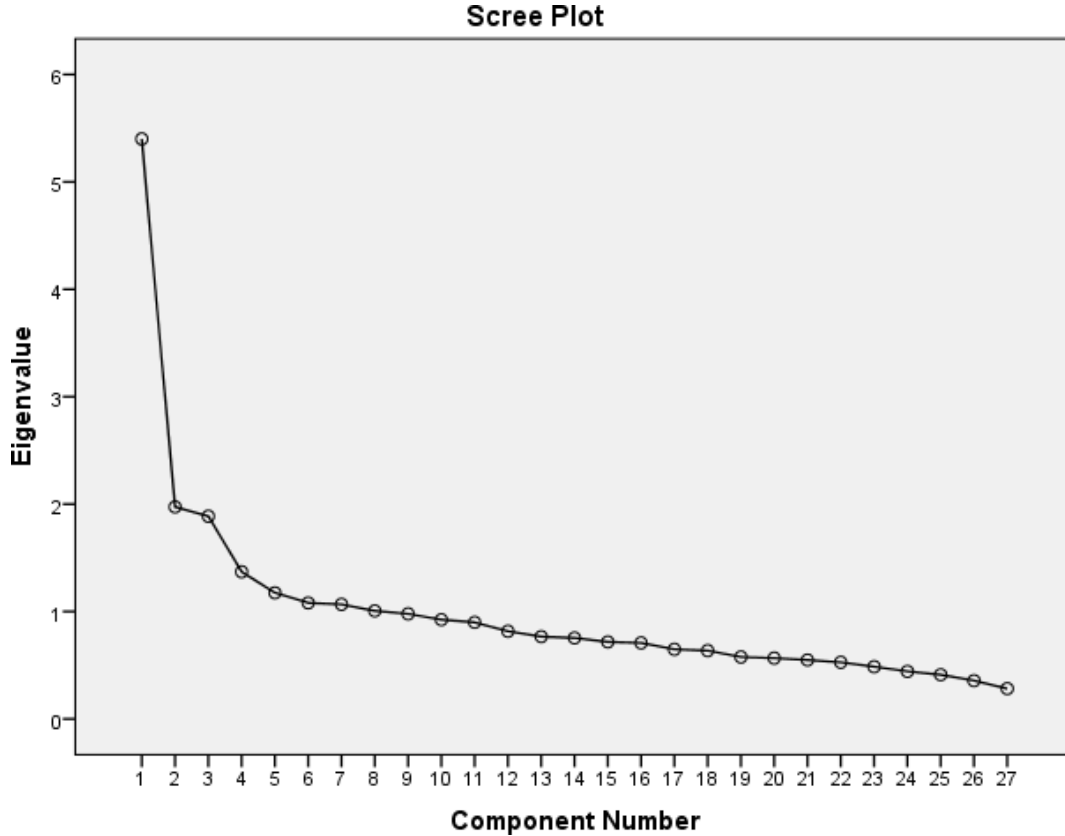
Figure 18: Graphical Depiction of the Progression of the Eigenvalues

4.6.4 Component Matrix – This table contains the unrotated factor loadings, which are the correlations between the variable and the factor. Because these are correlations, possible values range from -1 to +1. On the **/format** sub-command, we used the option **blank (.70)**, which tells SPSS not to print any of the correlations that are .7 or less. This makes the output easier to read by removing the clutter of low correlations that are probably not meaningful anyway.

Component – The columns under this heading are the unrotated factors that have been extracted. As you can see by the footnote provided by SPSS (a.), three components were extracted.

130

	Component							
	1	2	3	4	5	6	7	8
It is perceived that adaptive leaders remain calm while facing uncertain situations during scaling of Ed-tech product start-ups	0.363	0.287	-0.032	0.253	0.004	0.426	-0.102	-0.132
It is perceived that adaptive leaders may be intolerant to postponement and uncertainty at times during scaling of Ed-tech product start-ups	0.300	0.114	0.319	0.438	0.166	0.360	0.000	0.216
It is perceived that the positivity of adaptive leaders regarding the outcome of any new procedure may support the scaling of Ed-tech product start-ups	0.432	0.360	-0.055	0.196	0.139	0.201	-0.175	-0.186
It is perceived that effective communication by leaders leads to less ambiguity and uncertainty during scaling of Ed-tech product start-ups	0.472	0.491	-0.134	0.111	0.063	-0.065	-0.093	0.125
It is perceived that strong communication skills of leaders may help in strong messages being recalled and embraced by employees during scaling of start-ups	0.381	0.325	-0.143	-0.097	0.127	-0.290	-0.440	0.086
It is perceived that strong communication by leaders can motivate and inspire only few employees during scaling of Ed-tech product start-ups	0.117	-0.169	0.338	0.140	0.354	-0.283	0.125	0.479

	Component							
	1	2	3	4	5	6	7	8
It is perceived that; a good leader is expected to build solid relationships with those working along in Ed-tech product start-ups for better results	0.582	0.180	-0.094	-0.081	0.113	-0.077	-0.281	0.038
It is perceived that a strong leader has the ability to understand and optimize non-verbal communications with employees	0.490	0.198	-0.041	-0.123	-0.128	-0.250	-0.157	0.000
It is perceived that when a strong leader cooperate with others, best results can be achieved during scaling of Ed-tech product start-ups	0.526	0.171	-0.191	-0.018	0.250	-0.111	0.168	-0.125
It is perceived that due to a creative leader followers may get influenced to perform beyond expectations during scaling of Ed-tech product start-ups	0.512	0.077	-0.018	-0.560	-0.048	0.029	-0.098	0.226
It is perceived that due to a creative leader, followers may feel stress in making extra efforts to accomplish tasks when conditions are difficult during scaling of Ed-tech product start-ups	0.250	0.106	0.329	-0.607	0.059	0.280	0.245	-0.010

	Component							
	1	2	3	4	5	6	7	8
It is perceived that due to a creative leader followers may get influenced to generate creative solutions for work-related problems during scaling of Ed-tech product start-ups	0.495	0.143	-0.070	-0.401	-0.118	0.235	0.275	0.137
It is perceived that a strong leader happens to make a careful selection of decision-making processes with respect to complexities during scaling of Ed-tech product start-ups	0.401	0.410	0.072	0.059	0.046	0.033	0.311	-0.216
It is perceived that a strong leader develops the ability to analyse the contingencies in each situation and handle it effectively during scaling of Ed-tech product start-ups	0.436	0.291	0.051	0.079	-0.093	-0.313	0.326	-0.192
It is perceived that a strong leader can misjudge the possibilities during uncertainties during scaling of Ed-tech product start-ups	0.117	-0.115	0.610	0.025	0.088	0.033	0.033	-0.138
It is perceived that the success of start-ups in long term is dependent on the leaders' Aability to resist temptations	0.443	-0.133	0.272	-0.009	-0.129	-0.204	-0.194	-0.121
It is perceived that due to the leader's inability to tolerate a delay of gratification, employees need to exert more efforts for scaling of start-ups beyond deadlines	0.270	-0.157	0.636	-0.088	0.003	-0.064	-0.158	-0.268

	Component							
	1	2	3	4	5	6	7	8
It is perceived that due to the leader's tendency to impose strict standards of accomplishment upon oneself, the scaling of start-ups is achieved satisfactorily	0.321	-0.156	0.575	-0.023	0.114	0.020	-0.226	-0.007
It is perceived that the impact of adverse challenges during scaling of start-ups on the employees is dependent on the extent of the resiliency of the leader	0.480	0.202	0.199	0.214	-0.085	-0.010	0.169	0.074
It is perceived that resiliency of the leader is tested through the strength and flexibility of their systems and resources during scaling of start-ups	0.484	-0.001	0.068	0.211	-0.269	-0.059	0.216	0.406
It is perceived that resiliency of the leader is reflected in the form of the team of employees hired and maintained during scaling of start-ups	0.519	-0.278	-0.054	0.110	-0.295	0.106	-0.049	0.328
It is perceived that organizational effectiveness during scaling of start-ups is based on the empowering leadership pursued by the start-up leader	0.562	-0.290	-0.111	0.018	-0.373	0.160	-0.196	-0.002
It is perceived that employees' job performance during scaling of start-ups is based on the empowering leadership pursued by the start-up leader	0.508	-0.351	-0.078	0.066	-0.350	0.083	-0.053	-0.216

	Component							
	1	2	3	4	5	6	7	8
It is perceived that productivity of business during scaling of start-ups is based on the empowering leadership pursued by the start-up leader	0.438	-0.178	0.008	0.136	-0.223	-0.369	0.263	-0.186
Strong leadership manages uncertainties and opportunities leading to higher sales volume for Ed-Tech start-up businesses	0.568	-0.375	-0.310	0.126	0.178	0.123	0.033	-0.102
Strong leadership makes strong decisions leading to higher profit margins for Ed-Tech start-up businesses	0.550	-0.457	-0.250	0.008	0.374	0.013	0.152	-0.093
Strong leadership looks for creative and possible solution leading to higher sales with better profit margins for Ed-Tech start-up businesses	0.567	-0.444	-0.234	-0.095	0.417	0.002	0.005	-0.013
Extraction Method: Principal Component Analysis.								
a. 8 components extracted.								

Table 25: Component Matrix for the Considered Leadership Parameters

4.6.5 Component Matrix								
	Component							
	1	2	3	4	5	6	7	8
ADAPTABILITY (1)	0.363	0.287	-0.032	0.253	0.004	0.426	-0.102	-0.132
ADAPTABILITY (2)	0.300	0.114	0.319	0.438	0.166	0.360	0.000	0.216
ADAPTABILITY (3)	0.432	0.360	-0.055	0.196	0.139	0.201	-0.175	-0.186
STRONG COMMUNICATION (1)	0.472	0.491	-0.134	0.111	0.063	-0.065	-0.093	0.125

STRONG COMMUNICATION (2)	0.381	0.325	-0.143	-0.097	0.127	-0.290	-0.440	0.086
STRONG COMMUNICATION (3)	0.117	-0.169	0.338	0.140	0.354	-0.283	0.125	0.479
INTERPERSONAL SKILLS (1)	0.582	0.180	-0.094	-0.081	0.113	-0.077	-0.281	0.038
INTERPERSONAL SKILLS (2)	0.490	0.198	-0.041	-0.123	-0.128	-0.250	-0.157	0.000
INTERPERSONAL SKILLS (3)	0.526	0.171	-0.191	-0.018	0.250	-0.111	0.168	-0.125
CREATIVITY (1)	0.512	0.077	-0.018	-0.560	-0.048	0.029	-0.098	0.226
CREATIVITY (2)	0.250	0.106	0.329	-0.607	0.059	0.280	0.245	-0.010
CREATIVITY (3)	0.495	0.143	-0.070	-0.401	-0.118	0.235	0.275	0.137
DECISION MAKING (1)	0.401	0.410	0.072	0.059	0.046	0.033	0.311	-0.216
DECISION MAKING (2)	0.436	0.291	0.051	0.079	-0.093	-0.313	0.326	-0.192
DECISION MAKING (3)	0.117	-0.115	0.610	0.025	0.088	0.033	0.033	-0.138
SELF-DISCIPLINE (1)	0.443	-0.133	0.272	-0.009	-0.129	-0.204	-0.194	-0.121
SELF-DISCIPLINE (2)	0.270	-0.157	0.636	-0.088	0.003	-0.064	-0.158	-0.268
SELF-DISCIPLINE (3)	0.321	-0.156	0.575	-0.023	0.114	0.020	-0.226	-0.007
RESILIENCE (1)	0.480	0.202	0.199	0.214	-0.085	-0.010	0.169	0.074
RESILIENCE (2)	0.484	-0.001	0.068	0.211	-0.269	-0.059	0.216	0.406
RESILIENCE (3)	0.519	-0.278	-0.054	0.110	-0.295	0.106	-0.049	0.328
EMPOWERMENT (1)	0.562	-0.290	-0.111	0.018	-0.373	0.160	-0.196	-0.002
EMPOWERMENT (2)	0.508	-0.351	-0.078	0.066	-0.350	0.083	-0.053	-0.216
EMPOWERMENT (3)	0.438	-0.178	0.008	0.136	-0.223	-0.369	0.263	-0.186
SCALING PERFORMANCE (1)	0.568	-0.375	-0.310	0.126	0.178	0.123	0.033	-0.102
SCALING PERFORMANCE (2)	0.550	-0.457	-0.250	0.008	0.374	0.013	0.152	-0.093
SCALING PERFORMANCE (3)	0.567	-0.444	-0.234	-0.095	0.417	0.002	0.005	-0.013
Extraction Method: Principal Component Analysis.								
a. 8 components extracted.								

4.7 Hypothesis Testing

Based on the research objectives given above, following hypotheses were set to carry out the research, These were validated through statistical tools and procedures. Use by regression analysis.

4.7.1 Hypothesis 1

H1₀: Adaptability as a leadership attribute in scaling start-ups does not have a significant impact on Ed-tech businesses' scaling performance

H1₁: Adaptability as a leadership attribute in scaling start-ups does have a significant impact on Ed-tech businesses scaling performance

Regression analysis was conducted

Regression analysis is used for predict the value of a variable based on the value of another variable. The variable the study wants to predict is called the dependent variable.

In the below model summary table provides the R value. The R value represents the simple correlation and is 0.196 (the "**R**" Column), which indicates a 19.6% high degree of correlation.

Model Summary									
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	0.196[a]	0.038	0.036	0.76434	0.038	15.834	1	398	0.000
a. Predictors: (Constant), A									

The next table is the **ANOVA** table, which reports how well the regression equation fits the data:

ANOVA[a]						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	9.251	1	9.251	15.834	0.000[b]
	Residual	232.520	398	0.584		
	Total	241.771	399			
a. Dependent Variable: ED						
b. Predictors: (Constant), A						

ANOVA table indicates the statistically significance of the regression model that was run. Here p-value is .000, which is lesser than 0.05, and indicates that, the overall regression model in statistically significant predict the outcome variables. As a result, there is lack of sufficient evidence to accept null hypothesis, so the study accepts the alternative hypothesis that Adaptability as a leadership attribute in scaling start-ups does have a significant impact on Ed-tech businesses scaling performance.

4.7.2 Hypothesis 2

H2$_0$: Strong communication as a leadership attribute in scaling start-ups does not have a significant impact on Ed-tech businesses scaling performance

H2$_1$: Strong communication as a leadership attribute in scaling start-ups does have a significant impact on Ed-tech businesses scaling performance

Regression analysis was conducted

Regression analysis is used for predict the value of a variable based on the value of another variable. The variable the study wants to predict is called the dependent variable.

In the below model summary table provides the *R* value. The *R* value represents the simple correlation and is 0.192 (the "**R**" Column), which indicates a 19.2% high degree of correlation.

Model Summary									
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	0.192[a]	0.037	0.034	0.76492	0.037	15.215	1	398	0.000
a. Predictors: (Constant), B									

ANOVA[a]						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	8.902	1	8.902	15.215	0.000[b]
	Residual	232.869	398	0.585		
	Total	241.771	399			
a. Dependent Variable: ED						
b. Predictors: (Constant), B						

ANOVA table indicates the statistically significance of the regression model that was run. Here p-value is .000, which is lesser than 0.05, and indicates that, the overall regression model in statistically significant predict the outcome variables. As a result, there is lack of sufficient evidence to accept null hypothesis, so the study accepts the alternative hypothesis that Strong communication as a leadership attribute in scaling start-ups does have a significant impact on Ed-tech businesses scaling performance.

4.7.3 Hypothesis 3

H3$_0$: Interpersonal skills as a leadership attribute in scaling start-ups do not have a significant impact on Ed-tech businesses scaling performance

H3$_1$: Interpersonal skills as a leadership attribute in scaling start-ups do have a significant impact on Ed-tech businesses scaling performance

Regression analysis was conducted

Regression analysis is used for predict the value of a variable based on the value of another variable. The variable the study wants to predict is called the dependent variable.

In the below model summary table provides the *R* value. The *R* value represents the simple correlation and is 0.337 (the "**R**" Column), which indicates a 33.7% high degree of correlation.

139

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	0.337[a]	0.113	0.111	0.73393	0.113	50.848	1	398	0.000
a. Predictors: (Constant), C									

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	27.389	1	27.389	50.848	0.000[b]
	Residual	214.382	398	0.539		
	Total	241.771	399			
a. Dependent Variable: ED						
b. Predictors: (Constant), C						

ANOVA table indicates the statistically significance of the regression model that was run. Here p-value is .000, which is lesser than 0.05, and indicates that, the overall regression model in statistically significant predict the outcome variables. As a result, there is lack of sufficient evidence to accept null hypothesis, so the study accepts the alternative hypothesis that Interpersonal skills as a leadership attribute in scaling start-ups do have a significant impact on Ed-tech businesses scaling performance.

4.7.4 Hypothesis 4

H4$_0$: Creativity as a leadership attribute in scaling start-ups does not have a significant impact on Ed-tech businesses scaling performance

H4$_1$: Creativity as a leadership attribute in scaling start-ups does have a significant impact on Ed-tech businesses scaling performance

Regression analysis was conducted

Regression analysis is used for predict the value of a variable based on the value of another variable. The variable the study wants to predict is called the dependent variable.

In the below model summary table provides the *R* value. The *R* value represents the simple correlation and is 0.236 (the "**R**" Column), which indicates a 23.6% high degree of correlation.

Model Summary										
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					
					R Square Change	F Change	df1	df2	Sig. F Change	
1	0.236[a]	0.056	0.053	0.75742	0.056	23.434	1	398	0.000	
a. Predictors: (Constant), D										

ANOVA[a]						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	13.444	1	13.444	23.434	0.000[b]
	Residual	228.327	398	0.574		
	Total	241.771	399			
a. Dependent Variable: ED						
b. Predictors: (Constant), D						

ANOVA table indicates the statistically significance of the regression model that was run. Here p-value is .000, which is lesser than 0.05, and indicates that, the overall regression model in statistically significant predict the outcome variables. As a result, there is lack of sufficient evidence to accept null hypothesis, so the study accepts the alternative hypothesis that Creativity as a leadership attribute in scaling start-ups does have a significant impact on Ed-tech businesses scaling performance.

4.7.5 Hypothesis 5

H5$_0$: Decision Making as a leadership attribute in scaling start-ups does not have a significant impact on Ed-tech businesses scaling performance

H5$_1$: Decision Making as a leadership attribute in scaling start-ups does have a significant impact on Ed-tech businesses scaling performance

Regression analysis was conducted

Regression analysis is used for predict the value of a variable based on the value of another variable. The variable the study wants to predict is called the dependent variable.

In the below model summary table provides the *R* value. The *R* value represents the simple correlation and is 0.105 (the "**R**" Column), which indicates a 10.5% high degree of correlation.

Model Summary										
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					
					R Square Change	F Change	df1	df2	Sig. F Change	
1	0.105ª	0.011	0.009	0.77506	0.011	4.465	1	398	0.035	
a. Predictors: (Constant), E										

ANOVAª						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2.682	1	2.682	4.465	0.035ᵇ
	Residual	239.089	398	0.601		
	Total	241.771	399			
a. Dependent Variable: ED						
b. Predictors: (Constant), E						

ANOVA table indicates the statistically significance of the regression model that was run. Here p-value is .035, which is lesser than 0.05, and indicates that, the overall regression model in statistically significant predict the outcome variables. As a result, there is lack of sufficient evidence to accept null hypothesis, so the study accepts the alternative hypothesis that Decision Making as a leadership attribute in scaling start-ups does have a significant impact on Ed-tech businesses scaling performance.

4.7.6 Hypothesis 6

H6$_0$: Self-Discipline as a leadership attribute in scaling start-ups does not have a significant impact on Ed-tech businesses scaling performance

H6$_1$: Self-Discipline as a leadership attribute in scaling start-ups does have a significant impact on Ed-tech businesses scaling performance.

Regression analysis was conducted

Regression analysis is used for predict the value of a variable based on the value of another variable. The variable the study wants to predict is called the dependent variable.

In the below model summary table provides the *R* value. The *R* value represents the simple correlation and is 0.205 (the "**R**" Column), which indicates a 20.5% high degree of correlation.

Model Summary									
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	0.205^a	0.042	0.039	0.76290	0.042	17.400	1	398	0.000
a. Predictors: (Constant), F									

ANOVA[a]						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	10.127	1	10.127	17.400	0.000[b]
	Residual	231.644	398	0.582		
	Total	241.771	399			
a. Dependent Variable: ED						
b. Predictors: (Constant), F						

ANOVA table indicates the statistically significance of the regression model that was run. Here p-value is 0.000, which is lesser than 0.05, and indicates that, the overall regression model in statistically significant predict the outcome variables. As a result, there is lack of sufficient evidence to accept null hypothesis, so the study accepts the alternative hypothesis that Self-Discipline as a leadership attribute in scaling start-ups does have a significant impact on Ed-tech businesses scaling performance.

4.7.7 Hypothesis 7

H7$_0$: Resilience as a leadership attribute in scaling start-ups does not have a significant impact on Ed-tech businesses scaling performance

H7$_1$: Resilience as a leadership attribute in scaling start-ups does have a significant impact on Ed-tech businesses scaling performance

Regression analysis was conducted

Regression analysis is used for predict the value of a variable based on the value of another variable. The variable the study wants to predict is called the dependent variable.

In the below model summary table provides the *R* value. The *R* value represents the simple correlation and is 0.355 (the "**R**" Column), which indicates a 35.5% high degree of correlation.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	0.355[a]	0.126	0.124	0.72858	0.126	57.456	1	398	0.000
a. Predictors: (Constant), G									

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	30.500	1	30.500	57.456	0.000[b]
	Residual	211.271	398	0.531		
	Total	241.771	399			
a. Dependent Variable: ED						
b. Predictors: (Constant), G						

ANOVA table indicates the statistically significance of the regression model that was run. Here p-value is 0.000, which is lesser than 0.05, and indicates that, the overall regression model in statistically significant predict the outcome variables. As a result, there is lack of sufficient evidence to accept null hypothesis, so the study accepts the alternative hypothesis that Resilience as a leadership attribute in scaling start-ups does have a significant impact on Ed-tech businesses scaling performance.

4.7.8 Hypothesis 8

H8$_0$: Empowerment as a leadership attribute in scaling start-ups does not have a significant impact on Ed-tech businesses scaling performance

H8$_1$: Empowerment as a leadership attribute in scaling start-ups does have a significant impact on Ed-tech businesses scaling performance

Regression analysis was conducted

Regression analysis is used for predict the value of a variable based on the value of another variable. The variable the study wants to predict is called the dependent variable.

In the below model summary table provides the *R* value. The *R* value represents the simple correlation and is 0.456 (the "**R**" Column), which indicates a 45.6% high degree of correlation.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	0.456[a]	0.208	0.206	0.69375	0.208	104.335	1	398	0.000
a. Predictors: (Constant), H									

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	50.216	1	50.216	104.335	0.000[b]
	Residual	191.555	398	0.481		
	Total	241.771	399			
a. Dependent Variable: ED						
b. Predictors: (Constant), H						

ANOVA table indicates the statistically significance of the regression model that was run. Here p-value is 0.000, which is lesser than 0.05, and indicates that, the overall regression model in statistically significant predict the outcome variables. As a result, there is lack of sufficient evidence to accept null hypothesis, so the study accepts the alternative hypothesis that Resilience as a leadership attribute in scaling start-ups does have a significant impact on Ed-tech businesses scaling performance.

CHAPTER 5:

RESULTS AND DISCUSSIONS

5.1 Introduction

The current study aims to identify the role of leadership in business growth and performance in the context of Indian Ed-tech startups. Furthermore, it determines the main components of leadership effectiveness that contribute to the scaling of start-ups and specifically Indian Ed-tech startups and also analyses the impact of strong leadership on the scaling of start-ups and specifically Indian Ed-tech startups. For accomplishing the goals of the current study, a questionnaire survey was utilised and the collected data was analysed using descriptive statistics, reliability analysis, factor analysis and regression analysis.

5.2 Descriptive Statistics

All the respondents' Head Quarters were located in India. Moreover, 57.5 per cent of respondents were working in an organization that is an Ed-Tech Startup. Also, 41 per cent of the respondents worked in EdTech which is no more a startup rather, it has achieved the critical business mass. Additionally, 78.3 per cent of the respondents were males and 21.8 per cent were females. Concerning the age of the respondents, 34.5 per cent of respondents were around the age group of around 31- 35 years, followed by 26.3 per cent who belonged to the age group of 26-30 years and 13.5 per cent who belonged to the age group of 36-40 years. Also, 34.8 per cent of the respondents were working as Executives, 30.8 per cent worked as managers, and 24 per cent worked as senior managers. Approximately 40 per cent of the respondents were having experience of 5 years-10 years, followed by 33 per cent having an experience of less than 5 years and 11.3 per cent having an experience of 16-20 years. Also, 50 per cent of the respondents were graduates while 48 per cent were post-graduates. Concerning the annual income of the respondents, 31.5 per cent of respondents were earning around 12,00001-1800000 INR annually, 30 per cent were

earning around 500000-1200000 INR annually and 12.8 per cent were earning 1800001-2400000 INR annually.

5.3 Discussion on Statistical Data

5.3.1 The main components of leadership effectiveness that contribute to the scaling of start-ups and specifically Indian Ed-tech startups

Firstly, the study analysed the leadership attributes in scaling startups in the EdTech product space in India. These attributes included adaptability, strong communication, interpersonal skills, creativity, decision-making, self-discipline, resilience and empowerment. Majority of the respondents that is 63.5 per cent agreed with the statement that adaptive leaders remain calm while facing uncertain situations during the scaling of Ed-tech product start-ups. This study outcome is similar to that of Petrie (2014) who suggested that as India's start-up company ecosystem gets more complicated, turbulent, and unforeseeable, the talents required for leadership change would require more sophisticated and adaptive methods and flexible thinking abilities. Concerning the aspect of strong communication, 44.2 per cent of respondents strongly agreed with the statement that strong communication skills of leaders may help in strong messages being recalled and embraced by employees during the scaling of start-ups. While 60.5 per cent of the respondents agree with the statement that a good leader is expected to build solid relationships with those working in Ed-tech product start-ups for better results indicating the importance of strong interpersonal skills. The study results for the attributes of communication and interpersonal skills align with those of Joshi & Achuthan (2018) who suggested that along with technology talents, leadership, especially within startups, necessitates interpersonal skills, efficient communication, confidence, trustworthiness, acts devoid of ego, and admiration for successful teamwork.

Moreover, creativity is also significant. A creative leader's followers may get influenced to perform beyond expectations during the scaling of Ed-tech product start-ups. In this context, Baporikar (2015) asserted that to keep up its swift development and relieve

destitution, India must actively exploit its inventive potential, focusing on creativity-driven, swift, and equitable development to accomplish socioeconomic change. Further, in the present study, regarding the aspect of decision-making, 57.5 per cent of the respondents agree with the statement that a strong leader happens to make a careful selection of decision-making processes with respect to complexities during the scaling of Ed-tech product start-ups. Camuffo et al. (2020) suggested that considering the demanding and complicated decision-making scenarios that start-ups encounter, variety across functioning, business-related, informative, and prior experience settings can boost decision-making efficacy.

Moreover, 47.5 per cent of the respondents agree with the statement that the success of start-ups in the long term is dependent on the leaders, ability to resist temptations. Additionally, 51.2 per cent of the respondents agreed with the statement that the impact of adverse challenges during the scaling of start-ups on the employees is dependent on the extent of the resiliency of the leader. Also, for empowerment, the majority of the respondents agree that organizational effectiveness during the scaling of start-ups is based on the empowering leadership pursued by the start-up leader. As observed in the literature review, this study's finding aligns with that of Dvalidze and Markopoulos (2019) who stated that leaders have long been identified as one of the most critical aspects impacting the success of start-ups. The researchers suggested that entrepreneurial administration and empowerment is a novel idea in leadership research that seeks to gain an awareness of the complicated leadership procedures that occur during the startup and growth of new enterprises.

5.3.2 The Role of Leadership in business growth and Performance in the Context of Indian Ed-tech Startups

Regression analysis and the ANOVA test were used to evaluate the first hypothesis, and the p-value was determined to be.000, which is below the threshold of 0.05. This suggested that the whole regression framework could foresee the result of the parameters effectively. Therefore, the alternative hypothesis was accepted and it was concluded that Adaptability

as a leadership attribute in scaling start-ups has a significant impact on Ed-tech businesses scaling performance. In this context, Sreenivasan & Suresh (2023) revealed that growing start-ups requires agility, flexibility, and alignment considerations. Leadership participation, dispute resolution, teamwork, and data integration have all been proven to be critical.

Similarly, the p-value for the subsequent hypothesis was determined to be.000, which is below the threshold of 0.05. As a consequence, there was not enough proof for acceptance of the null hypothesis, hence the alternative hypothesis was adopted and it was concluded that Strong communication as a leadership attribute in scaling start-ups has a significant impact on Ed-tech businesses scaling performance. These study results are similar to the perceptions of Piscione (2013) who believes that the elements of a strong start-up environment include having an appropriate combination of skilled and seasoned entrepreneurs, investors, and researchers, having a productive workplace with informal offices and flexible communication. The researchers highlighted that communication plays a significant role in ensuring the success of a startup.

For the third hypothesis as well, the p-value was found to be .000, which is lesser than 0.05. Thus, the alternative hypothesis was accepted and it was concluded that Interpersonal skills as a leadership attribute in scaling start-ups do have a significant impact on Ed-tech businesses scaling performance. In this context, Bendickson et al. (2017) affirmed that Interpersonal skills such as efficient communication, compassion, and collaboration are important in developing connections, settling issues, and encouraging cooperation among teammates.

In the case of the fourth hypothesis, the p-value was found to be .000, which was lesser than 0.05. As a consequence, there is insufficient evidence to support the null hypothesis, hence the study adopts the alternative hypothesis that Creativity as a leadership trait in scaling start-ups has a major influence on Ed-tech firm scaling performance. These study

results align with those of Sengupta et al. (2021) who asserted that it is critical for a start-up that staff members regard its leaders to have an ethical viewpoint, an obvious degree of self-awareness, and openness in their interactions with other employees. These practices inspire individuals to engage in their job and behave proactively, which results in creativity. A robust kind of supportive leadership, as well as a great deal of creativity from staff members, is essential for every start-up to flourish.

For the fifth hypothesis, the p-value was found to be .035, which is less than 0.05. Therefore, there is a lack of sufficient evidence to accept the null hypothesis, so the study accepts the alternative hypothesis and contemplated that Decision Making as a leadership attribute in scaling start-ups does have a significant impact on Ed-tech businesses scaling performance.

In the sixth hypothesis, the ANOVA table and the regression analysis indicate the statistical significance of the regression model that was run. Since the p-value is 0.000, which is less than 0.05 the alternative hypothesis is accepted and it is concluded that Self-Discipline as a leadership attribute in scaling start-ups does have a significant impact on Ed-tech businesses scaling performance. Therefore, it can be concluded that Leadership in startups requires effective decision-making and self-discipline. Startups frequently thrive in rapid and unpredictable surroundings, necessitating prompt and accurate decisions from executives. Nawaz and Khan (2016) found that executives with good decision-making abilities can negotiate the intricacies of the startup environment and capitalise on new possibilities. Furthermore, executives must be self-disciplined in order to remain dedicated to goals, organise their time efficiently, and sustain an elevated level of performance.

The p-value for the seventh hypothesis is 0.000, which is below the threshold of 0.05. As a consequence of a lack of adequate data to accept the null hypothesis, the study adopts the alternative hypothesis and concludes that resilience as a leadership trait in scaling start-ups has a major influence on Ed-tech firm scaling performance.

Similarly, for the eighth hypothesis, the p-value is 0.000, which is less than 0.05. Therefore, the study accepts the alternative hypothesis and states that Empowerment as a leadership attribute in scaling start-ups does have a significant impact on Ed-tech businesses scaling performance. In this context, Cunningham and Lischeron (1993) revealed that a good leader is one that sets precise objectives, creates chances, empowers individuals, maintains corporate proximity and builds a human resource framework.

5.3.3 The impact of strong leadership on the scaling of start-ups and specifically Indian Ed-tech startups

The study's findings emphasize the crucial role of strong leadership in driving success for Ed-Tech startup businesses. It highlights that effective leadership plays a significant role in managing uncertainties and identifying opportunities, which, in turn, leads to higher sales volume for these startups. A notable 42.5 percent of the respondents acknowledged that strong leadership results in making robust decisions, ultimately contributing to higher profit margins for Ed-Tech startups. Additionally, 39.5 percent of respondents agreed that strong leadership actively seeks creative and viable solutions, resulting in increased sales and improved profit margins for these businesses.

These study results are consistent with the research conducted by Zaech & Baldegger in 2017, who also emphasized the critical importance of leadership styles in the success of startups. However, despite the growing evidence highlighting the significance of leadership, a concerning trend exists where a majority of entrepreneurs tend to overlook its importance and may not recognize it as a key driver of motivation for establishing a firm.

In summary, the study underscores the pivotal role of strong leadership in navigating uncertainties, making effective decisions, and seeking innovative solutions, all of which contribute to higher sales and improved profit margins for Ed-Tech startup businesses. Recognizing and embracing effective leadership practices can significantly impact the achievements and growth prospects of these startups, ultimately leading to their sustained success in the dynamic and competitive Ed-Tech industry.

5.4 Summary

Leadership holds immense sway over the process of scaling startups in the EdTech product market. The impact of effective leadership cannot be overstated, as it not only shapes the strategic direction of the business but also fosters an environment conducive to creativity and growth. In the dynamic landscape of the EdTech industry, where technological advancements and evolving learning needs present a myriad of possibilities and challenges, effective leadership becomes indispensable in navigating these complexities.

Leaders who possess a well-structured strategy and possess the ability to inspire and motivate their team can effectively rally their employees around a shared purpose. By encouraging a mindset of constant improvement, these leaders empower their teams to push the boundaries of what was previously thought possible, thereby creating and delivering high-quality instructional offerings.

Moreover, successful leaders play a significant role in steering the organization with a clear strategic vision. They not only guide the company's trajectory but also create an environment that nurtures creativity and innovative thinking. This approach encourages employees to think critically and explore novel solutions to meet the evolving needs of learners and educators alike.

Furthermore, the EdTech sector is characterized by its rapid technological progress and ever-changing learning demands. As a result, leaders in this field must be adaptable and proficient problem solvers. Effective leaders embrace challenges as growth opportunities, deftly turning them into avenues for expansion and progress.

Uniting employees behind a shared purpose is a hallmark of impactful leadership. Leaders who lead by example and embody the organization's values can foster a culture of continuous improvement. This culture not only encourages innovation but also empowers

teams to make a positive impact on education, contributing to the overall success of the startup.

Communication is a vital aspect of leadership in the EdTech market. Leaders who communicate their strategic vision and goals clearly to all stakeholders, including employees, investors, customers, and partners, foster trust and alignment. This transparency helps build a cohesive and collaborative work environment, ensuring that everyone is on board with the company's mission.

In conclusion, effective leadership plays a central role in the scaling of startups in the EdTech product market. It involves providing a clear strategic direction, encouraging creativity, embracing technology, motivating employees to push boundaries, and fostering a culture of continuous improvement. By navigating the complexities of the EdTech market with a well-organized strategy and clear communication, successful leaders can drive their startups towards prosperity and meaningful contributions to the field of education.

CHAPTER 6:

CONCLUSION AND RECOMMENDATIONS

6.1 Major Findings:

The research looked at the impact of leadership & its characteristics of scaling businesses in the EdTech product market in emerging market such as India. Adaptability, strong communication, interpersonal skills, creativity, decision-making, self-discipline, resilience, and empowerment were among these characteristics. It was discovered that adaptable leaders remain cool in the face of unpredictable conditions when scaling Ed-tech product start-ups. Furthermore, the great communication skills of leaders may aid in strong messages being remembered and accepted by staff throughout start-up growth.

During the scaling of Ed-tech product start-ups, a creative leader's followers may be motivated to perform above expectations. A great leader would also carefully pick decision-making methods with regard to complications throughout the growth of Ed-tech product start-ups. The long-term viability of start-ups is contingent on the leaders' capacity to resist enticement. Furthermore, the effect of adverse circumstances during the growth of start-ups on workers is reliant on the leader's level of endurance. In terms of empowerment, nearly all of the respondents think that the start-up leader's leadership empowerment is the foundation of organizational performance during the scaling process.

Concerning the role of Leadership in business growth and Performance in the Context of Ed-tech Startups in emerging markets such as India, it was revealed that Adaptability as a leadership attribute in scaling start-ups has a significant impact on Ed-tech businesses scaling performance. Additionally, strong communication, Interpersonal skills, Creativity, Self-Discipline, resilience and Empowerment as leadership attributes in scaling start-ups also have a significant impact on Ed-tech businesses scaling performance. Furthermore, regarding the aspect of strong leadership on the scaling of start-ups and specifically Indian Ed-tech startups, it was found that Strong leadership manages uncertainties and

opportunities leading to higher sales volume for Ed-Tech start-up businesses. Also, strong leadership makes strong decisions leading to higher profit margins for Ed-Tech start-up businesses and strong leadership looks for creative and possible solutions leading to higher sales with better profit margins for Ed-Tech start-up businesses.

6.2 Recommendations:

Based on the study findings, the following recommendations have been provided

➔ It is important to examine how experts in EdTech companies adjust their tactics, operations, and goods to the specific difficulties and possibilities that emerging countries like India bring. Case studies from effective EdTech businesses that have shown adaptation and the unique leadership skills and practices that have added to their expanding attempts must be analyzed.

➔ Further, the entrepreneurs must investigate the importance of interpersonal relationships in EdTech startup administration. The EdTech startups must examine how executives convey the purpose, objectives, and principles of the organization to staff members, supporters, and customers. It is therefore important to investigate how leadership promote open and forthcoming communication avenues, across all levels, in order to facilitate effective scaling and making of choices.

➔ Moreover, it is essential to incorporate the communication abilities required for executives in the EdTech startup environment. The startups must examine ways leaders develop and maintain connections with colleagues, shareholders, consumers, and other partners. In the extremely competitive EdTech industry, it is important to examine the influence of effective management on staff motivation, participation, and preservation, in addition to acquiring and maintaining consumers.

➔ Integration of innovation in management and its influence on the growth of EdTech firms may play a vital role in the success of startups. Examining how leaders build an environment of innovation, inspire imaginative thinking, and use unique techniques to produce and sell EdTech solutions may assist in scaling startups in EdTech Product Space. Also, investigating how managers motivate and encourage

their employees to look beyond limitations in order to find new possibilities in developing marketplaces may prove to be crucial.

➔ Further, the startups must examine the decision-making techniques used by executives in growing EdTech firms. Examining the methods used by leaders to collect and assess information, consult important parties, and reach choices in an environment of ambiguity is essential. It is important to analyse how sound decision-making affects the expansion and viability of EdTech firms, especially in developing nations like India.

➔ The EdTech Startups must also investigate the role of self-control in leadership in EdTech companies. Examining the methods used by strong leaders for disciplining their employees, setting and upholding rigorous standards, competently handling their time and finances, and more is crucial. Examining how self-discipline helps EdTech firms in developing countries succeed over a prolonged period and grow may prove to be essential for EdTech Startups.

➔ The EdTech Startup stakeholders must look at the function of leadership resilience and how it affects growing EdTech firms. It is important to comprehend the strategies that successful leaders use to overcome obstacles, disappointments, and problems while motivating teammates to keep going and grow. The startup leaders must analyse the tactics and procedures used by tenacious leaders in the community of EdTech startups, especially with regard to growing markets.

➔ Further, EdTech leaders must examine the ways in which managers encourage teamwork while growing EdTech firms. It is essential to analyze the ways in which leaders assign tasks, promote a sense of responsibility and independence, and offer chances for improvement. The EdTech stakeholders must examine how empowered leadership affects creativity, staff engagement, and ultimately organizational success in the EdTech sector.

6.3 Limitations:

The present study, aimed at evaluating the impact of leadership in scaling startups within the EdTech Product Space in emerging markets like India, must be viewed with certain

limitations in mind. The complexities inherent in organizational growth make it challenging to isolate the sole influence of leadership on scaling initiatives. Numerous other variables, such as market circumstances, product-market compatibility, financial considerations, interpersonal relationships, and external factors, also play significant roles in determining the overall success or failure of businesses.

Leadership is just one aspect that contributes to a startup's performance and scalability. The broader business environment and various internal and external factors can interact and influence outcomes, making it difficult to attribute scaling success solely to leadership practices. Therefore, caution must be exercised in drawing conclusive cause-and-effect relationships between leadership and scaling achievements.

Furthermore, the influence of leadership observed in the context of EdTech startups in India's emerging market may not necessarily be directly applicable to other situations or locations. Emerging markets possess unique socio-cultural, financial, and legislative characteristics that set them apart from more established markets. These distinctions can impact the way leadership strategies are perceived and implemented. Therefore, attempts to generalize the findings of the current study to startups in other locales or sectors should be approached with caution.

To enhance the applicability and robustness of research findings, future studies should aim to encompass a more diverse range of contexts and markets. A comparative analysis of leadership's impact on scaling startups in various industries, regions, and developmental stages would provide a more comprehensive understanding of the underlying mechanisms and their generalizability.

In conclusion, while the current study sheds light on the impact of leadership in scaling startups within the EdTech Product Space in emerging markets like India, it is essential to recognize its limitations. Organizational growth is influenced by a multitude of factors beyond leadership, and contextual differences between markets can limit the immediate

relevance of findings to startups in other regions or industries. Future research endeavors must address these limitations and pursue a more comprehensive approach to yield valuable insights with broader applicability.

6.4 Future Research:

In order to fully comprehend the significance of leadership in scaling startups within the EdTech Product Space, particularly in emerging markets such as India, it becomes imperative to conduct future research studies that delve into a comprehensive examination of various factors that interplay with leadership. These factors encompass market circumstances, product-market compatibility, financial considerations, interpersonal relationships, and numerous others.

Market circumstances hold a pivotal role in shaping the growth trajectory of startups. Understanding how leadership strategies interact with the dynamic nature of emerging markets like India is vital. Leaders must adapt their approaches to address the unique challenges and opportunities presented by such markets. For instance, they may need to navigate regulatory complexities, address cultural nuances, and align their products with the evolving demands of the local population.

Another critical aspect that warrants exploration is product-market compatibility. Leaders must be adept at evaluating the suitability of their EdTech products in the specific market they target. Research should assess how leadership decisions impact the alignment of products with the needs and preferences of the target audience. Effective leadership in this context involves making informed decisions, refining product offerings, and fostering innovation to remain relevant in the evolving EdTech landscape.

Financial considerations cannot be overlooked when investigating the impact of leadership on scaling startups. Leaders play an instrumental role in securing funding, managing financial resources efficiently, and implementing sustainable business models. Analyzing the relationship between leadership practices and financial outcomes is crucial in

comprehending how leaders influence the financial success and growth potential of startups.

Furthermore, interpersonal relationships are instrumental in nurturing a productive and cohesive startup culture. Effective leadership fosters open communication, trust, and collaboration among team members. Studying the interplay between leadership styles and team dynamics can shed light on how these factors influence the overall performance and scalability of startups in the EdTech domain.

While examining the impact of leadership in the EdTech Product Space in emerging markets like India is essential, it is equally crucial to draw comparisons with other regions and industries. By observing the effects of leadership on scaling startups in different contexts, researchers can identify patterns, commonalities, and best practices that transcend specific settings. Such a broader perspective allows for the derivation of more generalizable insights that can benefit startups in various sectors and regions worldwide.

In conclusion, future research studies focusing on leadership's impact on scaling startups in the EdTech Product Space in emerging markets like India must adopt a multifaceted approach. Analyzing the interplay of leadership with market circumstances, product-market compatibility, finance, interpersonal relationships, and drawing cross-contextual comparisons is essential for gaining a deeper understanding and generating valuable insights that can inform and empower leaders in the rapidly evolving world of EdTech startups.

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Questionnaire

on

IMPACT OF LEADERSHIP IN SCALING STARTUPS IN EDTECH PRODUCT SPACE IN EMERGING MARKETS SUCH AS INDIA

Part A: Demographic Profile

1. **Name of the respondent (optional):** ....

2. **Name of the Organization:** ....

3. **Gender :** ☐ Male

   ☐ Female

4. **Age (yrs):** ☐ 21-30

   ☐ 31-40

   ☐ 41-50

   ☐ 51-60

   ☐ 61 and above

5. **Job Title:** ☐ Executive

   ☐ Manager

   ☐ Senior Manager

   ☐ Top management

6. Education level: ☐ Graduate

☐ Post graduate

☐ Others

7. Income(per annum: ☐ 0 - 5, 00,000

☐ 5, 00,000 – 10, 00,000

☐ 10, 00,000 – 15, 00, 000

☐ 15, 00,000 – 20, 00,000

8. Work Experience: ☐ Less than 5 years

☐ 5 years - 10 years

☐ 11 years - 15 years

☐ 16 years - 20 years

☐ Over 20 years

Part B

On a scale of 1-5, please indicate the degree to which you agree to the statements given below based on your experience (1=Strongly Disagree 2=Disagree 3=Neutral 4=Agree and 5=Strongly agree).

Leadership attributes

Statement	1	2	3	4	5
Adaptability (Karia & Asaari, 2019)					

It is perceived that adaptive leaders remain calm while facing uncertain situations during scaling of Ed-tech product start-ups					
It is perceived that adaptive leaders may intolerant of postponement and uncertainty at times during scaling of Ed-tech product start-ups					
It is perceived that the positivity of adaptive leaders regarding the outcome of any new procedure may support the scaling of Ed-tech product start-ups					
Strong communication (Neufeld et al., 2010)					
It is perceived that effective communication by leaders leads to less ambiguity and uncertainty during scaling of Ed-tech product start-ups					
It is perceived that strong communication skills of leaders may help in strong messages being recalled and embraced by employees during scaling of start-ups					
It is perceived that strong communication by leaders can motivate and inspire only few employees during scaling of Ed-tech product start-ups					
Interpersonal skills (Subrahmanyam, 2018)					
It is perceived that; a good leader is expected to build solid relationships with those working along in Ed-tech product start-ups for better results					
It is perceived that a strong leader has the ability to understand and optimize non-verbal communications with employees					
It is perceived that when a strong leader cooperates with others, best results can be					

achieved during scaling of Ed-tech product start-ups				
Creativity (Çekmecelioğlu & Özbağ, 2016)				
It is perceived that a due to a creative leader followers may get influenced to perform beyond expectations during scaling of Ed-tech product start-ups				
It is perceived that due to a creative leader, followers may feel stress in making extra efforts to accomplish tasks when conditions are difficult during scaling of Ed-tech product start-ups				
It is perceived that due to a creative leader followers may get influenced to generate creative solutions for work-related problems during scaling of Ed-tech product start-ups				
Decision Making (Kayode et al., 2014)				
It is perceived that a strong leader happens to make a careful selection of decision-making processes with respect to complexities during scaling of Ed-tech product start-ups				
It is perceived that a strong leader develops the ability to analyze the contingencies in each situation and handle it effectively during scaling of Ed-tech product start-ups				
It is perceived that a strong leader can misjudges the possibilities during uncertainties during scaling of Ed-tech product start-ups				
Self-Discipline (Dhiman, 2015)				

It is perceived that the success of start-ups in long term is dependent on the leaders' ability to resist temptations					
It is perceived that due to the leader's inability to tolerate a delay of gratification, employees need to exert more efforts for scaling of start-ups beyond deadlines					
It is perceived that due to the leader's tendency to impose strict standards of accomplishment upon oneself, the scaling of start-ups is achieved satisfactorily					
Resilience (Southwick et al., 2017)					
It is perceived that the impact of adverse challenges during scaling of start-ups on the employees is dependent on the extent of the resiliency of the leader					
It is perceived that resiliency of the leader is tested through the strength and flexibility of their systems and resources during scaling of start-ups					
It is perceived that resiliency of the leader is reflected in the form of the team of					

employees hired and maintained during scaling of start-ups					
Empowerment (Vu, 2020)					
It is perceived that organizational effectiveness during scaling of start-ups is based on the empowering leadership pursued by the start-up leader					
It is perceived that employees' job performance during scaling of start-ups is based on the empowering leadership pursued by the start-up leader					
It is perceived that productivity of business during scaling of start-ups is based on the empowering leadership pursued by the start-up leader					

Ed-tech businesses scaling performance

Statement	1	2	3	4	5
Strong leadership manages uncertainties and opportunities leading to higher sales volume for Ed-Tech start-up businesses					
Strong leadership makes strong decisions leading to higher profit margins for Ed-					

Tech start-up businesses					
Strong leadership looks for creative and possible solution leading to higher sales with better profit margins for Ed-Tech start-up businesses					

APPENDIX B

SURVEY COVER LETTER

Subject: Survey on "Impact of Leadership for Scaling Edtech Product Startups in emrging markets such as India"

Dear [Participant's Name],

I am reaching out to you as part of my academic research project, which aims to investigate the "Impact of Leadership for Scaling Edtech Product Startups in Emerging Markets like India." Your valuable insights and experiences as an employee of an Edtech product startup in India can significantly contribute to the success of this study.

The rapid growth and transformative potential of the Edtech industry in India have garnered immense attention in recent years. As a result, numerous Edtech product startups have emerged, striving to revolutionize education delivery and learning experiences for students across the country. The leadership within these startups plays a pivotal role in shaping their trajectory and fostering innovation.

The primary objective of this survey is to understand your perspectives on the leadership practices within your Edtech product startup and how they have contributed to the scaling and growth of the organization in the dynamic and diverse market of India. Your candid feedback will help uncover critical factors and strategies that have proven effective in navigating the challenges and seizing the opportunities present in the Edtech industry.

The survey is brief and will take just a few minutes to complete. Your responses will be kept confidential and used solely for academic research purposes.

Survey Link: https://forms.gle/bA4ZndUdTCfkt7Yp6
Thank you for contributing to this research.

Sincerely,
Ramya Chatterjee
Doctoral Research Scholar
SSBM, Geneva
ramya@ssbm.ch
+91-9818778982

181

INFORMED CONSENT

Informed Consent Form

Title of Study: "Impact of Leadership for Scaling Edtech Product Startups in Emerging Markets such as India"

Principal Investigator: Mr. Ramya Chatterjee
Contact Information: ramya@ssbm.ch, +91-9818778982

Introduction:

You are invited to participate in a research study conducted by Mr. Ramya Chatterjee, a Doctoral Reaserch Scholar at SSBM, Geneva. The purpose of this study is to investigate the "Impact of Leadership for Scaling Edtech Product Startups in Emerging Markets like India." The study aims to understand the perspectives of employees working in Edtech product startups in India and how leadership practices influence the scaling and growth of these organizations.

Participation:

Your participation in this study is entirely voluntary. You have the right to decline to participate or withdraw from the study at any time without any penalty or loss of benefits. Choosing not to participate or withdrawing from the study will not affect your current or future relationship with SSBM, Geneva or any associated organization.

Procedures:

If you agree to participate in this study, you will be asked to complete an anonymous online survey. The survey will include questions related to your experiences and perspectives on leadership practices within your Edtech product startup. It is estimated to take approximately 10 minutes to complete.

Risks and Benefits:

There are no known risks associated with participating in this study. However, by sharing your experiences, you may contribute valuable insights that can benefit the Edtech community in India by enhancing understanding of effective leadership practices for scaling startups.

Confidentiality:

Your responses will be treated with strict confidentiality. Personal identifiers will not be collected, ensuring that your participation remains anonymous. Only the researchers involved in this study will have access to the collected data, and the results will be presented in a manner that does not allow individual identification.

Data Storage and Security:

All collected data will be stored securely on password-protected electronic devices and encrypted servers. The data will be retained for a period of 5 years, after which it will be securely disposed of.

Publication and Presentation:

The results of this study may be used for academic purposes, including publication in research journals or presentation at academic conferences. However, your individual identity will remain confidential and will not be disclosed in any publication or presentation.

Contact Information:

If you have any questions or concerns about the research study, you may contact the Principal Investigator, Mr. Ramya Chatterjee, at ramya@ssbm.ch or +91-9818778982.

Consent:

By proceeding with the survey, you indicate your voluntary agreement to participate in this research study and confirm that you have read and understood this Informed Consent Form. If you consent to participate, please click on the "Agree" button below. If you do not wish to participate, you may simply close the browser.

Thank you for considering participating in this study.

Sincerely,

Ramya Chatterjee
Doctoral Research Scholar
SSBM, Geneva
ramya@ssbm.ch
+91-9818778982

INTERVIEW GUIDE

Interview Guide: "Impact of Leadership for Scaling Edtech Product Startups in Emerging Markets such as India"

Title of Study: "Impact of Leadership for Scaling Edtech Product Startups in Emerging Markets such as India"

Introduction:

Thank you for participating in this interview. The purpose of this study is to investigate the "Impact of Leadership for Scaling Edtech Product Startups in Emerging Markets like India." Your valuable insights and experiences as an employee of an Edtech product startup will contribute to the understanding of effective leadership practices within the industry. This interview will be conducted in a semi-structured format, allowing for a flexible discussion while covering key aspects related to leadership and scaling in the Edtech sector.

Confidentiality:

Your participation in this interview is strictly confidential. All information shared during the interview will be anonymized and used for research purposes only.

General Questions:

1. Can you briefly introduce yourself and your role in the Edtech product startup?
2. How long have you been working with the company, and what motivated you to join an Edtech startup?

Leadership and Vision:

1. From your perspective, how would you describe the leadership style within the organization?
2. How does the leadership team communicate the company's vision and goals to the employees?

3. How has the leadership's vision contributed to the growth and scaling of the Edtech startup in the Indian market?

Challenges and Adaptability:

1. In the dynamic landscape of the Edtech industry, what are some challenges the organization faced during its scaling journey?
2. How has the leadership team adapted its strategies to overcome these challenges and capitalize on emerging opportunities?

Team Building and Talent Development:

1. How does the leadership foster a positive and innovative work culture within the organization?
2. How is talent identified, nurtured, and developed within the company to support its growth plans?

Customer Focus and Market Understanding:

1. How does the leadership team stay attuned to the needs and preferences of the target audience in the Indian market?
2. How do they ensure that the products and services offered are aligned with the demands of the customers?

Innovation and Technology:

1. How does the leadership encourage innovation and the integration of technology in the Edtech products or services offered?
2. Can you share any examples of how innovative approaches or technologies have positively impacted the company's growth?

Measuring Success and Performance:

1. How is the success of the organization and its leadership evaluated in terms of scaling and growth?
2. What key performance indicators (KPIs) are used to assess the company's progress in achieving its goals?

Conclusion:

1. Is there anything else you would like to add regarding the impact of leadership on scaling an Edtech product startup in India?

Thank You:

Ramya Chatterjee
Doctoral Research Scholar
SSBM, Geneva
ramya@ssbm.ch
+91-9818778982

Disclaimer:

I, Ramya Chatterjee, declare that this Global DBA thesis titled "IMPACT OF LEADERSHIP IN SCALING STARTUPSIN EDTECH PRODUCT SPACE IN EMERGING MARKETS SUCH AS INDIA" is my original work, and all contributions from external sources have been duly acknowledged through proper citations and references. I affirm that this thesis is free from any form of plagiarism, and all ideas, concepts, data, figures, and texts from external sources have been appropriately cited in accordance with the guidelines provided by SSBM, Geneva, and academic standards.

In conducting this research, I have followed all ethical guidelines and protocols as required by SSBM, Geneva, and any relevant regulatory bodies. Any research involving human subjects, animals, or sensitive data was conducted with necessary approvals and informed consent. I acknowledge that this research project has its limitations, including potential bias, scope constraints, and limitations in data collection and analysis. However, I have made every effort to ensure the validity and reliability of the findings presented in this thesis. I am committed to upholding the principles of academic integrity and adhering to the code of conduct set forth by SSBM, Geneva. Any opinions, findings, conclusions, or recommendations expressed in this thesis are solely mine and do not necessarily reflect the views of SSBM, Geneva, or its faculty. Neither I, Ramya Chatterjee, nor SSBM, Geneva, its faculty, or any affiliated individuals shall be held liable for any consequences arising from the use or interpretation of the information presented in this thesis. I hereby submit this thesis to SSBM, Geneva, in partial fulfillment of the requirements for the degree of DBA.

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Ramya Chatterjee

July 31, 2023